
Appendix E
Additional Information to
Support Cumulative
Effects Analyses



E. ADDITIONAL INFORMATION TO SUPPORT CUMULATIVE EFFECTS ANALYSES

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E.1 INTRODUCTION

The following discussions provide additional information to support the analyses of cumulative effects to fish and water resources in Section 4.15 of this Environmental Impact Statement. Tables E-4 through E-21 summarize conditions at the watershed scale for each of the resource areas addressed in Section 4.15.

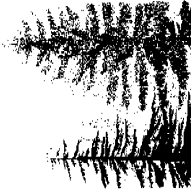
E.1.1 Fish

E.1.1.1 Columbia Planning Unit

DNR-managed trust lands make up at least 5 percent of the total area in 38 watersheds in the Columbia Planning Unit (Table E-1). DNR trust lands represent the majority (over 50 percent of watershed) of 3 watersheds (Cold Creek, Upper Washougal, and Abernethy) and substantial proportion (25 to 50 percent of watershed) in 8 others. Most of the watersheds (32) include anadromous fish streams and 9 watersheds have bull trout, but none of the watersheds with bull trout has a majority in DNR trust lands. In addition:

- Stream density in the Columbia Planning Unit is relatively high compared to other planning units.
- Ten watersheds have a higher percentage (greater than 33 percent) of the riparian zone as small trees (less than 10 inches in diameter). Of these, DNR trust lands are a majority owner in the Upper Washougal and a substantial owner in the North Fork and Upper South Fork watersheds.
- Just over half of the watersheds with 5 percent DNR trust land ownership are in the significant rain-on-snow zones with more than 20 percent of the trees in a hydrologically immature status.
- Six watersheds have streams on the 303(d) list for temperature. DNR trust lands are major owners in the Abernethy and substantial owners in the Upper South Fork.
- Only 1 watershed (Main Fork) has a high proportion with unstable slopes and DNR trust lands are only a minor owner (less than 25 percent of the watershed).
- Urban and agricultural land use is moderate in the Columbia Planning Unit relative to other planning units (averaging 7.5 percent of watershed area). Just over one-quarter of the watersheds in the planning unit were in the upper quartile for the percentage of area in the urban or agricultural land use categories (Table E-1).

The Columbia Planning Unit has a moderate risk of cumulative effects to fish resources relative to other westside Planning Units. The measures for which the Columbia Planning Unit ranked high relative to other planning units include the number of watersheds in the upper quartile for small trees in riparian areas, stream density, area of hydrologic immaturity in the significant rain-on-snow zones, and the percent area in urban or agricultural land use (Table E-1). Watersheds of potential concern to DNR because of major amounts of westside trust land ownership and high rankings in two or more of the measures include the Upper Washougal and Abernethy. The Upper Washougal has a high



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Table E-1. Number of Watersheds in the Upper Quartile, Percent of Upper Quartile, and Percent of Watersheds in a Planning Unit with at Least 5 Percent DNR Trust Land Ownership for each Measure of Cumulative Effects to Fish Resources

Measure	Columbia			South Coast			Olympic Experimental State Forest			Straits			North Puget			South Puget			Total Number of watersheds in Upper Quartile
	Number	% of Upper Quartile	% of Planning Unit watersheds	Number	% of Upper Quartile	% of Planning Unit watersheds	Number	% of Upper Quartile	% of Planning Unit watersheds	Number	% of Upper Quartile	% of Planning Unit watersheds	Number	% of Upper Quartile	% of Planning Unit watersheds	Number	% of Upper Quartile	% of Planning Unit watersheds	
Small Trees	11	24.4%	28.9%	9	20.0%	37.5%	6	13.3%	26.1%	5	11.1%	27.8%	6	13.3%	9.8%	8	17.8%	53.3%	45
Bull Trout Stream Density	3	6.7%	7.9%	2	4.4%	8.3%	5	11.1%	21.7%	1	2.2%	5.6%	33	73.3%	54.1%	1	2.2%	6.7%	45
Anadromous Fish Stream Density	2	4.4%	5.3%	7	15.6%	29.2%	16	35.6%	69.6%	0	0.0%	0.0%	18	40.0%	29.5%	2	4.4%	13.3%	45
Resident Fish Stream Density	3	6.7%	7.9%	11	24.4%	45.8%	12	26.7%	52.2%	1	2.2%	5.6%	16	35.6%	26.2%	2	4.4%	13.3%	45
Stream Density	19	42.2%	50.0%	15	33.3%	62.5%	6	13.3%	26.1%	0	0.0%	0.0%	1	2.2%	1.6%	4	8.9%	26.7%	45
Hydrologic Maturity in Significant Rain-on-Snow Zones	20	44.4%	52.6%	0	0.0%	0.0%	5	11.1%	21.7%	4	8.9%	22.2%	11	24.4%	18.0%	5	11.1%	33.3%	45
303(d) list for temperature	4	8.9%	10.5%	4	8.9%	16.7%	13	28.9%	56.5%	5	11.1%	27.8%	16	35.6%	26.2%	3	6.7%	20.0%	45
303(d) list for fine sediment	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	100.0%	3.3%	0	0.0%	0.0%	2
Shallow rapid landslides	1	2.2%	2.6%	1	2.2%	4.2%	8	17.8%	34.8%	5	11.1%	27.8%	29	64.4%	47.5%	1	2.2%	6.7%	45
Urban and Agricultural Land Use	10	22.2%	26.3%	9	20.0%	37.5%	1	2.2%	4.3%	6	13.3%	33.3%	17	37.8%	27.9%	2	4.4%	13.3%	45
Average	7.2	16.0%	18.9%	6.2	13.8%	25.8%	7.5	16.7%	32.6%	2.6	5.8%	14.4%	14.6	42.0%	23.9%	2.6	5.8%	17.3%	
Number of watersheds with at least 5% DNR ownership	38			24			23			18			61			15			179

Data Source: DNR MASK Geographic Information System layer



percentage of small trees in the riparian zone (37 percent), a high proportion of the rain-on-snow zone in hydrologically immature forest (26 percent), and high stream density (7.7 miles per square mile). Abernethy includes a substantial stream length (over 1 mile) on the 303(d) list for temperature and high stream density (7.7 miles per square mile).

Private ownership predominates in the Columbia Planning Unit, with private industrial or private non-industrial ownership averaging about 64 percent of the area of watersheds with at least 5 percent DNR trust lands. DNR trust lands and Federal Ownership averages about 21 percent and 20 percent, respectively. Consequently, forest management activities on private lands under State Forest Practices Rules will predominate. During the first decade, Alternatives 1 to 5 are expected to have forest management activities on between 3 percent and 9 percent of the riparian land class, while Alternative 6 is expected to have forest management activities on about 17 percent of the riparian land class. Alternatives that propose more riparian harvest (particularly Alternative 6) on DNR trust lands would have a higher relative risk of contributing to adverse cumulative effects to fish resources.

E.1.1.2 South Coast Planning Unit

DNR-managed trust lands make up at least 5 percent of the total area in 24 watersheds in the South Coast Planning Unit, and most of these are located in the southern part of the unit. DNR trust lands represent the majority of 4 watersheds (Porter Creek, Cedar Creek, Waddel Creek, and Mill Creek) and a substantial proportion of 8 others. All of the watersheds with DNR trust land ownership include anadromous fish streams, and 7 watersheds have bull trout, but none of the watersheds with bull trout has a majority proportion in DNR trust lands. In addition:

- Anadromous fish stream density (0.45 miles per square mile), resident fish stream density (2.03 miles per square mile), and overall stream density (8.34 miles per square mile) are relatively high compared to other planning units.
- Six watersheds have a high percentage (greater than 33 percent) of the riparian zone as small trees, and DNR trust lands are a substantial owner in the Rock-Jones, South Fork Willapa, Elk Creek, and Nemah watersheds.
- None of the watersheds with 5 percent DNR trust land ownership have rain-on-snow areas with more than 20 percent of the trees in a hydrologically immature status.
- Ten watersheds have streams on the 303(d) list for temperature. DNR trust lands are substantial owners in three of them—the Garrard Creek, Cedar Creek, and Porter Creek watersheds.
- One of the watersheds (Lower Naselle) has a high proportion with unstable slopes.
- The South Coast Planning Unit has a high amount of land use (averaging 9.3 percent of watershed area) in the urban and agricultural categories relative to other planning units and over one-third of the watersheds were in the upper quartile for this measure



Similar to the Columbia Planning Unit, the South Coast Planning Unit is considered to be at moderate relative risk of adverse cumulative effects relative to the other planning units. The measures for which the South Coast Planning Unit ranked high were small trees in riparian areas, urban and agricultural land use, and anadromous fish, resident fish, and overall stream density. Watersheds of potential concern to the DNR because of substantial or major amounts of westside trust land ownership and high rankings in three or more of the measures include Mill Creek, Garrard Creek, and South Fork Willapa. Mill Creek ranked high in unstable slopes (18.1 percent of watershed area), overall stream density (10.87 miles per square mile), and area of the riparian zone with small trees (33 percent of riparian area). Garrard Creek ranked high in anadromous fish stream density (0.63 miles per square mile), resident fish stream density (2.08 miles per square mile), urban and agricultural land use (13.9 percent of watershed area), and amount of stream on the 303(d) list for temperature (3.9 miles). The South Fork Willapa has a high proportion (38 percent) of small trees in the riparian zone, and a high density of anadromous fish, resident fish, and overall stream density (0.59, 2.15, and 11.16 miles per square mile, respectively).

There is almost no federal ownership in any of the watersheds that have at least 5 percent DNR trust land ownership. Private forest ownership accounts for an average of about 65 percent of watershed area, while DNR trust lands account for an average of about 29 percent. Over the first decade of the planning period, harvest activities in riparian zones on DNR trust lands for the South Coast Planning Unit are fairly similar among Alternatives 2 through 5 (range 5 to 8 percent of the riparian land class). Alternative 1 is somewhat lower at about 2 percent of the riparian land class while Alternative 6 is higher at about 26 percent of the riparian land class. Planning of harvest activities at the higher levels may require caution, particularly because of the relatively large areas with private ownership, which are more likely to receive more intensive management.

E.1.1.3 Olympic Experimental State Forest Planning Unit

DNR-managed trust lands make up at least 5 percent of the total area in 23 watersheds in the Olympic Experimental State Forest Planning Unit. DNR trust lands represent the majority of 4 watersheds (Upper Clearwater, Middle Hoh, Kalaloch Ridge, and Clallam River) and a substantial proportion of 10 others. All of the watersheds with at least 5 percent DNR trust land ownership include anadromous fish streams, and 9 watersheds have bull trout. In addition:

- The Olympic Experimental State Forest has relatively high levels of resident fish, anadromous fish, and bull trout stream density of the planning units with an average of 2.09, 0.70, and 0.07 miles per square mile, respectively.
- Six watersheds have a high percentage (greater than 33 percent) of the riparian zone as small trees. Of these, DNR trust lands are a majority owner in the Kalaloch Ridge watershed and a substantial owner in the Lower Clearwater, Cedar, and Goodman-Mosquito watersheds.



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- Five of the watersheds with 5 percent DNR trust land ownership have rain-on-snow areas with more than 20 percent of the trees in a hydrologically immature status.
- Sixteen watersheds have streams on the 303(d) list for temperature. DNR trust lands are major owners in 3 of them (Middle Hoh, Kalaloch Ridge, and Clallam River) and have substantial ownership in the Sol Duc Valley (01 and 02), Bogachiel, and East Dickey watersheds.

Five watersheds have a high proportion with unstable slopes. DNR trust lands are a majority owner in four of the watersheds with a high proportion of unstable slopes.

Relative to other planning units, the Olympic Experimental State Forest is considered to be at high relative risk of adverse cumulative effects to fish resources because of the relatively high density of resident fish, anadromous, and bull trout streams. Measures that suggest relatively poor conditions or higher relative risk of adverse effects include the amount of area in the rain-on-snow zone with immature forest, the amount of streams on the 303(d) list for temperature, and the amount of area at potential risk of mass wasting. Nine watersheds in the Olympic Experimental State Forest with at least one-third DNR trust land ownership had two or more measures ranked in the upper quartile. The Lower Clearwater and the Middle Hoh had six and seven, respectively, of the ten measures in the upper quartile.

Ownership patterns in the Olympic Experimental State Forest is fairly mixed. Federal ownership (averaging 22 percent of the watershed area) is concentrated in the upper watersheds as part of the Olympic National Forest while private (43 percent average) and DNR trust land (33 percent average) ownership is concentrated in lower watersheds along with most fish resources. Future forest management activities on federal lands under the Northwest Forest Plan are expected to be minimal, while activities under private ownership are expected to be more intensive. Forest management activities in riparian areas on DNR trust lands over the next decade are expected to be relatively low under Alternatives 1 through 4 (about 1 to 4 percent of the riparian land class), but relatively high under Alternatives 5 and 6 (about 21 percent and 41 percent, respectively, of the riparian land class). However, under Alternative 6, 90 percent of the harvest area will be impacted with light volume removal harvests, such as light thinnings and single tree removals. These activities are targeted at restoration activities. Because of the relatively high sensitivity, relatively poor conditions, or relatively high levels of relative risk-prone areas in the Olympic Experimental State Forest compared to other planning units, forest management activities on DNR trust lands will require careful planning and monitoring to reduce potential adverse cumulative effects, especially at the levels proposed under Alternative 5.

E.1.1.4 Straits Planning Unit

DNR-managed trust lands make up at least 5 percent of the total area in 18 watersheds in the Straits Planning Unit. DNR trust lands represent the majority of 2 watersheds (Lyre and Lilliwaup) and a substantial proportion of 4 other watersheds (Salt, Twins, Sequim Bay, and Dabob). Anadromous fish are found in all of the watersheds with at least 5 percent DNR trust land ownership and 6 watersheds that have bull trout. DNR trust land makes up a small proportion of all of the watersheds with bull trout. In addition:



- Five watersheds have a high percentage (greater than 33 percent) of the riparian zone as small trees. Of these, DNR trust lands are a majority owner in the Lyre watershed and a substantial owner in the Dabob and Twins watersheds.
- Few of the watersheds (4) with 5 percent DNR trust land ownership have rain-on-snow areas with more than 20 percent of the trees in a hydrologically immature status and only one of these (Twins) has substantial DNR trust land ownership.
- Five watersheds have streams on the 303(d) list for temperature of which DNR trust lands are substantial owners in the Dabob watershed.
- Approximately one-third of the watersheds in the Straits Planning Unit ranked in the upper quartile for urban or agricultural land use and 2 of these also ranked high for having streams on the 303(d) list.
- More than one-quarter (5) of the watersheds have a high proportion with unstable slopes and DNR trust land ownership is major in one these watersheds (Lyre) and substantial in another (Twins).

Relative to other westside planning units, the Straits Planning Unit is considered to be at low relative risk of adverse cumulative effects resulting from forest management activities. watersheds of relative potential concern from DNR forest management activities include the Dabob, Lyre and Twins watersheds. In the Dabob, DNR trust land ownership is relatively low in the watershed (about 28 percent), but about 2 miles of stream have been placed on the 303(d) list for temperature. The Lyre and Twins watersheds each have a major DNR trust land ownership, and both ranked high for high percentage of small trees in the riparian zone (36 percent and 34 percent, respectively) and the amount of unstable slopes (20 percent and 51 percent, respectively). The Twins also ranked high for the level of hydrologically immature forest in the rain-on-snow zone (about 26 percent of the rain-on-snow zone).

Ownership in the Straits Planning Unit is predominately private, averaging about 52 percent of the watersheds with at least 5 percent DNR ownership, and most of this is non-industrial ownership. Federal ownership is concentrated in upper watersheds as part of the Olympic National Forest. Federal and DNR trust land ownership in lower watersheds is fairly even with an average of about 28 and 22 over the watersheds, respectively. Forest management activities in riparian areas on DNR trust lands over the next decade are expected to be relatively low under Alternatives 1 through 5 (range 2 to 8 percent of the riparian land class). Activity under Alternative 6 is expected to be relatively higher at about 24 percent of the riparian land class. While the relative risk of adverse cumulative effects to fish resources from DNR forest management is generally low for the Straits Planning Unit, care is needed at the higher activity levels to avoid potentially contributing to adverse effects in particular watersheds that may be at higher relative risk.

E.1.1.5 North Puget Planning Unit

DNR-managed trust lands make up at least 5 percent of the total area in 61 watersheds in the North Puget Planning Unit. DNR trust lands represent the majority owner of 9 watersheds (Cypress, Warnick, Pilchuck Mountain, Spada, Cavanaugh, Sultan River,



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Alder, Lower Middle, and Clearwater Creek) and a substantial proportion of 16 other watersheds (Table E-1). Most of the watersheds (51) include anadromous fish streams and 48 watersheds have bull trout. The North Puget Planning Unit has the highest density of bull trout streams of all the planning units (average of 0.22 miles per square mile). In addition:

- Six watersheds have a high percentage (greater than 33 percent) of the riparian zone as small trees. Of these, DNR trust lands are a majority owner in the Warnick and a substantial owner in the Skookum Creek, Hutchinson Creek, and Porter Canyon watersheds.
- Eleven of the watersheds with 5 percent DNR trust land ownership have rain-on-snow areas with more than 20 percent of the trees in a hydrologically immature status.
- Twenty-three watersheds have streams on the 303(d) list for temperature of which DNR trust lands are major owners in the Warnick watershed and substantial owners in the Nookachamps, Raging River, Porter Canyon, Skookum Creek, Wallace River, Acme, and Ebey Hill watersheds.
- Two watersheds (Howard Creek and Warnick) have streams on the 303(d) list for sediment.
- A relatively high number of watersheds (29) have a high proportion with unstable slopes. DNR trust lands are a major owner in four of these watersheds (Spada, Clearwater Creek, Lower Middle, and Warnick) and a substantial owner in four (Porter Canyon, Wallace River, Skookum Creek, and Hazel).
- The North Puget Planning Unit has 17 watersheds within the upper quartile for the amount of urban and agricultural land use.

Compared to other westside planning units, the North Puget Planning Unit has a relatively high risk for adverse cumulative effects to fish resources. The planning unit has relatively high sensitivity with high anadromous, resident fish, and bull trout stream densities. Other measures contributing the determination of relative high risk include hydrologic maturity in the rain-on-snow zone, 303(d) listings for temperature and sediment, risk of mass wasting, and levels of urban and agricultural land use. The following five watersheds have at least one-third DNR trust land ownership and ranked in the upper quartile for three or more measures: Warnick, Hutchinson Creek, Ebey Hill, Rinker, and Alder.

DNR trust lands in the North Puget Planning Unit are predominately in mid-elevation watersheds. High-elevation watersheds towards the Cascade Crest are predominately under federal ownership in the Mount Baker National Forest. In contrast, lowland areas are highly urbanized or have agricultural land use. Private land ownership predominates (51 percent of area) on average for watersheds with at least 5 percent DNR trust lands, followed by federal ownership (35 percent) and DNR trust lands (26 percent).

Consequently, in addition to DNR strategies, both private forest management strategies and federal strategies can be important in any given watershed. Over the next decade, activities in riparian areas on DNR trust lands are expected to be relatively low under Alternatives 1



through 5 (about 2 to 5 percent of the riparian land class), but relatively higher under Alternative 6 (about 20 percent of the riparian land class, although half of the activities will be low volume removal harvests). Consequently, planning and monitoring will be relatively more important under Alternative 6 to avoid potentially contributing to adverse cumulative effects in watersheds that are relatively higher at-risk.

E.1.1.6 South Puget Planning Unit

DNR-managed trust lands make up at least 5 percent of the total area in 15 watersheds in the South Puget Planning Unit. DNR trust lands represent the majority of 3 watersheds (Reese Creek, North Fork Mineral, and Catt) and a substantial proportion of 5 other watersheds (North Fork Green, Howard Hansen, Summit Lake, Ashford, and Busy Wild). About half of the watersheds (8) include anadromous fish streams and 3 watersheds have bull trout (Cumberland, Tiger, and Howard Hansen). DNR trust lands are not a majority of any watersheds with bull trout. In addition:

- Eight watersheds have a high percentage (greater than 33 percent) of the riparian zone as small trees. DNR trust lands are a majority owner in the North Fork Mineral, Catt, and Reese Creek and a substantial owner in the Busy Wild, North Fork Green, and Howard Hansen watersheds.
- One-third of the watersheds with 5 percent DNR trust land ownership have rain-on-snow areas with more than 20 percent of the trees in a hydrologically immature status. DNR trust lands have substantial ownership in Howard Hansen, North Fork Green, and Busy Wild watersheds.
- Three watersheds have streams on the 303(d) list for temperature. DNR trust lands are major owners in the Catt watershed and substantial owners in the Howard Hansen watershed.
- Only one of the watersheds (Tiger) has a high proportion with unstable slopes, and DNR trust lands are a minor component.

The South Puget Planning Unit is considered to be at low-to-moderate relative risk of adverse cumulative effects to fish resources relative to other planning units. Just over half (8) of the 15 watersheds with at least 5 percent DNR trust lands ranked in the upper quartile for have small trees in riparian areas, and one-third of the watersheds ranked in the upper quartile for high percentages of immature forest in the rain-on-snow zone. watersheds of relative potential concern from DNR forest management activities include the Catt, North Fork Mineral, North Fork Green, and Reese Creek watersheds. Each of these has at least one-third of the watershed in DNR trust land ownership and ranked high for the percentage of small trees in the riparian zone (49 percent, 60 percent, 38 percent, and 49 percent, respectively). The Catt watershed also has 1.4 miles of stream on the 303(d) list for temperature. The North Fork Green also ranked high for the amount of immature forest in the rain-on-snow zone (27 percent).

DNR trust lands ownership is are primarily in the upper watersheds in the South Puget Planning Unit and concentrated in two blocks located to the north and south in the planning



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unit. Similar to the North Puget Planning Unit, the South Puget Planning Unit is dominated by federal ownership in the upper watersheds (Snoqualmie National Forest), and urban and agricultural land use in the lowlands. Private ownership (47 percent on average) and federal (20 percent on average) are also important in watersheds with at least 5 percent DNR trust lands. Forest management activities on DNR trust lands in riparian areas over the next decade are expected to be relatively low under Alternatives 1 through 5 (range about 2 percent to 7 percent of the riparian land class) in the South Puget Planning Unit and relatively higher under Alternative 6 (about 16 percent of the riparian land class, in which 70 percent are projected to be low volume removal harvests).

E.1.2 Hydrologic Maturity

This section analyzes the areas (planning units, and individual watersheds) in terms of their relative potential for high peak flows associated with hydrologic maturity, and identifies opportunities for DNR to reduce potential peak flows from rain-on-snow events by maintaining mature forest in the significant rain-on-snow zones. In attempting to identify westside areas with significant DNR ownership that were potentially at relatively higher risk for high peak flows, the data were analyzed by watershed and planning unit levels, but not at the sub-basin level. The Procedure for Assessing Hydrologic Maturity (PR 14-004-060) was not followed for this analysis because appropriate data was not available for all ownerships at the sub-basin level, and other ownerships do not follow this DNR procedure. Instead, watersheds and Planning Units are discussed in terms of percent area that is hydrologically immature in the significant rain-on-snow zones, and by ownership.

Table E-2 summarizes the distribution of watersheds that rank in the top quartile of the 159 watersheds analyzed for area of immature forest in the significant rain-on-snow zones. The amount of immature forest in significant rain-on-snow zones varies by planning unit. The South Coast planning unit has no watersheds in the top quartile for this analysis, while Columbia has almost half of the units in this category, including the three watersheds with the greatest area classified as immature forest in the significant rain-on-snow zone. Additionally, eleven watersheds have more than one third of their area classified as immature in the significant rain-on-snow zone, as shown in Appendix H1. Ten of these units have DNR ownership in less than 5 percent of the classified areas, and one watershed has DNR ownership of 18 percent of the classified areas. Of the planning units ranked in the top quartile for this analysis, DNR ownership is most significant in the Olympic Experimental State Forest, meaning that DNR forest management has potentially the greatest risk, as well as the greatest ability to control and prevent potential peak flow impacts in the Olympic Experimental State Forest Planning Unit.

None of the Alternatives would alter the amount of harvest allowable in the significant rain-on-snow zones or change the policies or procedures related to harvest in the DNR Habitat Conservation Plan-determined rain-on-snow zones. In all of the Alternatives, the percentage of mature forest on DNR lands within the “significant” rain-on-snow zones (the rain on snow and snow dominated zones) of watersheds will not drop below 66 percent, as defined in the Habitat Conservation Plan (page IV. 68) and procedure 14-004-060. The Olympic Experimental State Forest has the largest percent immature forest in the



Table E-2. Percent of Area and Ownership Distribution in Watersheds^{1/} (Top Quartile) with the Largest Area of Immature Forest in the Significant Rain-On-Snow Zones

Planning Unit	Number of Watersheds	Average Percent of Area Classified as Immature in the Significant Rain-On-Snow Zones in Watershed	Average Percent Area Classified as Immature in the Significant Rain-on-Snow Zones in Different Ownerships			
			DNR	Federal	Private	Other
Columbia	18	33%	12%	24%	61%	3%
North Puget	9	28%	11%	39%	43%	4%
OESF	5	33%	30%	58%	0%	9%
South Coast	0	NA	NA	NA	NA	NA
South Puget	4	27%	15%	7%	67%	7%
Straits	4	35%	3%	94%	0%	0%
Westside	40	31%	13%	48%	32%	6%

Data Source: DNR MASK Geographic Information System layer

OESF = Olympic Experimental State Forest

1/ The term watershed is used in this analysis to denote Washington DNR watershed Administrative Units per March 2002 delineations

significant rain-on-snow zones under DNR ownership, meaning that this is the planning unit in which DNR has relatively the greatest opportunity and carries relatively the greatest risk for increasing peak flows.

Management intensity (indicated by decadal average values for acreage of higher-volume harvest) and forest management activity type in the Olympic Experimental State Forest can be ranked by alternative to address the potential for relative impacts to this area in terms of potential risk of increasing hydrologic immaturity in the significant rain-on-snow zones. Alternative 4 would have the least intensive management of the Olympic Experimental State Forest, approximately 800 acres per decade and would therefore require the least commitment of planning resources to prevent increases in peak flows. Alternatives 1 and 6 would essentially be identical in terms of high volume removal harvest in the Olympic Experimental State Forest, with an average of approximately 5,200 acres per decade. Under Alternatives 2, 3, and 5, higher volume removal harvest would occur on an average of approximately 23,000, 22,000, and 31,000 acres per decade, respectively.

E.1.3 Water Quality

E.1.3.1 Temperature

Temperature of stream water is partially a function of climate, shade and elevation. Stream water temperature may be increased due to forest management activities by removal of vegetation, which shades streams, and increased runoff in the watershed. Watersheds that have the greatest stream length listed for temperature are considered at the greatest relative risk: this criteria may be useful in allocating planning resources to assess temperature and forest management interactions.



Appendix E

Of the 63 watersheds with 303(d) listings for temperature that have greater than 5 percent DNR ownership, 41 are located in the North Puget and Olympic Experimental State Forest planning units. As shown in Table E-3, the planning unit where DNR has the largest ownership along 303(d) listed streams is Columbia. South Puget, Columbia and Straits

Table E-3. Miles of 303(d) Listed Streams that are Listed for Temperature, by Planning Unit and Ownership

Planning Unit	Number of Watersheds ^{1/} Affected	Average Elevation (feet) of Affected Watersheds	Miles of 303(d) Listed Streams	Stream Mileage by Ownership			
				DNR	Federal	Private	Other
Columbia	7	1,249	11.69	2.17	0.57	8.42	0.53
North Puget	24	1,681	3.95	0.88	0.00	3.05	0.02
OESF	17	595	6.70	0.24	0.00	6.34	0.12
South Coast	11	590	3.94	0.00	0.00	3.58	0.36
South Puget	4	2,015	13.30	0.72	1.40	6.79	4.39
Straits	6	715	10.67	0.00	0.00	9.61	1.06
Total	69		50.25	4.00	1.97	37.80	6.48

Data Source: DNR MASK Geographic Information System layer

OESF = Olympic Experimental State Forest

* The term "watershed" is used in this analysis to denote Washington DNR watershed Administrative Units per March 2002 delineations

planning units have the greatest length of listed streams for temperature, followed by OESF and North Puget and South Coast. There is no correlation between average elevation of a given watershed and miles of stream listed for temperature. In all cases, at the planning unit level, the lengths of stream listed by planning unit are dominated by private timber ownership.

The watersheds where 303(d) listings occur for temperature under majority DNR ownership along listed length are:

- Abernethy (250104) and Upper South Fork Toutle (260508) in the Columbia Planning Unit
- Skookum Creek (010309), French Boulder (050204), and Ebey Hill (050214) in the North Puget Planning Unit
- Middle Hoh (200607) and Rain Forest (200505) in the Olympic Experimental State Forest Unit

These watersheds carry the greatest relative risk for temperature.

E.1.3.2 Dissolved Oxygen

As discussed in Section 4.8, Water Quality, dissolved oxygen content is a function of stream chemistry, biology and physics. Temperature and nutrient levels are partial variables controlling the dissolved oxygen levels in a stream. If dissolved oxygen levels drop too low, the health of aquatic life in the stream will be affected.



Ten watersheds with 303(d) listings for dissolved oxygen have greater than 5 percent DNR ownership on the west side of the Cascade crest, for a total of 38.57 miles of 303(d) listed streams for Fine Sediment on these watersheds. Of these, DNR owns land along a total of 0.04 miles of listed stream in the Sol Duc Lowlands (200416) in the Olympic Experimental State Forest Planning Unit. The majority of ownership along these stream miles is privately held forest land. All watersheds with streams listed for dissolved oxygen are below 530 feet average elevation (see Table E-16). If forest management activities are planned in these watersheds, the 303 (d) listing may be useful in allocating planning resources to assess temperature and forest management interactions. In particular, the use of fertilizers in these watersheds should be planned to avoid effects on these streams.

E.1.3.3 Fine Sediment

As discussed in Section 2.8, Water Quality, fine sediment may increase due to increased road use, new road construction, or surface erosion due to harvest activities. Fine sediment is of particular concern, because chronic inputs of fine sediment can damage spawning habitat.

As shown in Table E-17, only two westside watersheds where DNR owns at least 5 percent of the total area that have 303(d) listings for fine sediment: Howard Creek (010308) at 2,393 feet average elevation, and Warnick (010229) at 2406 feet average elevation. Both of these watersheds are in the North Puget Planning Unit. The 303(d) listings for fine sediment streams in westside watersheds total 2.64 miles in length. DNR owns land along 0.02 mile of this length of Warnick (010229). These two streams should be evaluated for potential impacts from harvest if harvest is planned in these watersheds. New forest roads and additional forest road traffic that would affect these streams should be evaluated carefully in terms of mitigation and avoidance of increased surface erosion.

Table E-4. Percent of the Forested Area in Each Watershed in the Small-Diameter, Open Forest Condition Class^{1/}

Watershed Name (and Number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Columbia Planning Unit							
Green River (260515)	46,383	46,092	37%	1%		35%	1%
North Fork Toutle (260514)	41,051	37,985	33%	8%		23%	2%
Silverstar (280204)	32,719	31,912	29%	6%	2%	19%	1%
Hamilton Creek (280106)	32,845	31,299	29%	6%	10%	8%	5%
Bremer (260331)	19,894	19,253	27%	4%	2%	21%	1%
Winston (260320)	28,321	27,909	27%	4%		23%	0%
Upper SF Toutle (260508)	40,031	38,141	25%	10%	2%	13%	1%
Swift Creek (270304)	74,150	66,002	22%	2%	5%	15%	0%
Delameter (260623)	37,243	33,641	22%	2%		21%	0%
Rock Creek Clark (270508)	35,440	34,297	22%	3%	5%	13%	0%
Cedar Creek (260428)	14,441	14,072	22%	1%		20%	1%
Stillwater (260625)	28,905	27,450	22%	1%		21%	0%
Upper Washougal (280205)	31,719	31,708	21%	12%	3%	5%	0%
Harmony (260330)	22,546	12,574	20%	3%		16%	2%
Middle Kalama (270114)	51,534	50,826	20%	1%		19%	0%
Cedar Creek (270416)	36,416	31,133	20%	2%	0%	17%	0%
Salmon Creek (260421)	43,837	36,964	19%	1%		18%	1%
Little Washougal (280203)	30,269	22,282	19%	5%		13%	0%
Rock Creek (290415)	41,733	39,142	19%	7%	3%	8%	0%
Lower Kalama (270113)	49,823	43,903	19%	1%		17%	0%
Skamokawa (250209)	51,687	44,179	18%	3%	0%	14%	0%
Lake Merwin (270415)	46,439	40,524	18%	6%	0%	11%	0%
Grays Bay (250310)	56,613	43,943	18%	1%		17%	0%
Cold Creek (270509)	21,281	18,899	18%	13%	1%	4%	0%
Main Elochoman (250208)	37,009	26,884	18%	3%	0%	14%	0%
North Elochoman (250203)	23,518	23,222	16%	3%		13%	0%
South Fork Toutle (260513)	42,623	41,212	16%	4%		11%	0%
Cougar (270317)	32,888	29,908	15%	5%	4%	6%	0%
West Fork Grays River (250311)	10,347	10,188	15%	3%		13%	0%
Mill Creek (260429)	26,163	20,431	14%	2%		12%	0%
Wind River (290414)	30,669	29,091	14%	2%	10%	2%	0%
Olequa (260626)	35,017	22,162	13%	1%		11%	0%
South Fork Grays River (25030)	16,774	16,193	12%	5%		8%	0%
Woodland (270412)	37,827	23,086	12%	3%	0%	10%	0%
Abernethy (250104)	40,071	38,700	12%	6%	0%	6%	0%
Lacamas (280202)	41,185	20,775	10%	1%	2%	7%	1%
Siouxon (270305)	39,066	38,827	9%	4%	5%	0%	0%
Spirit Lake (260507)	52,151	34,924	7%	4%	3%	1%	0%
Planning Unit Average			19%	4%	1%	13%	0%
North Puget Planning Unit							
Kenney Creek (010230)	2,791	2,633	34%	2%		32%	0%
Deming (010226)	27,527	23,676	28%	13%		15%	0%
Porter Canyon (010327)	18,550	18,139	26%	9%		15%	3%
Vedder (010131)	21,272	17,850	24%	7%	0%	18%	0%
Hansen Creek (030102)	29,010	20,993	24%	6%		17%	0%
Acme (010311)	23,518	18,723	23%	6%		17%	0%

Table E-4. Percent of the Forested Area in Each Watershed in the Small-Diameter, Open Forest Condition Class^{1/}

Watershed Name (and Number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Lower MF Snoqualmie (070307)	28,375	26,901	23%	13%	5%	4%	0%
West Shannon (040435)	14,333	13,458	23%	5%	0%	18%	0%
Tate (070409)	9,798	7,772	23%	2%		21%	0%
Cherry (070420)	38,183	31,531	21%	4%		17%	0%
Hutchinson Creek (010310)	13,975	13,525	21%	8%		13%	0%
Howard Creek (010308)	39,040	38,766	21%	4%	0%	16%	1%
Skookum Creek (010309)	23,905	23,675	20%	8%	0%	12%	0%
Warnick (010229)	25,436	24,817	20%	13%	0%	6%	0%
Canyon Creek (010232)	36,807	36,235	19%	4%	6%	9%	0%
Alder (030103)	22,865	20,294	18%	12%		6%	0%
Lower Pilchuck Creek (050313)	19,364	17,101	18%	2%		16%	0%
Raging River (070408)	22,853	21,307	18%	5%		13%	0%
Samish Bay (010414)	13,258	10,390	18%	4%		11%	2%
Grandy (040534)	18,856	17,804	17%	3%		14%	0%
Friday Creek (030313)	24,129	20,498	17%	4%		13%	0%
Gilligan (030106)	18,879	17,089	17%	3%		13%	1%
Jordan (050108)	21,252	17,364	17%	0%	0%	16%	0%
Ebey Hill (050214)	19,812	15,819	17%	9%		8%	0%
Verlot (050107)	23,540	21,900	16%	1%	10%	6%	0%
Lake Whatcom (010412)	35,957	28,708	16%	7%		9%	0%
Woods Creek (070223)	42,463	35,484	16%	4%		11%	0%
Clearwater Creek (010328)	14,330	14,277	16%	11%	3%	2%	0%
Pilchuck Mtn (070226)	42,517	40,350	16%	9%	0%	6%	0%
Upper NF Stilly (050202)	32,833	32,818	16%	2%	11%	3%	0%
Wallace River (070217)	24,667	23,219	16%	6%	3%	5%	2%
Olney Creek (070225)	20,655	18,579	15%	5%		10%	0%
South Snoqualmie (070306)	57,077	53,758	15%	2%	6%	5%	2%
Day Creek (030105)	22,203	22,077	15%	2%	1%	12%	0%
Loretta (030104)	15,769	15,010	15%	1%	4%	9%	0%
Tolt (070415)	63,357	60,617	14%	1%	1%	10%	2%
Spada (070216)	44,197	40,479	14%	10%	2%	0%	2%
Sauk Prairie (040320)	14,137	13,412	14%	5%	2%	7%	0%
Youngs Creek (070219)	23,776	21,907	14%	2%	0%	12%	0%
Nookachamps (030107)	47,730	38,077	14%	5%		9%	0%
Samish River (030301)	57,397	33,587	14%	3%		10%	0%
Sumas River (010125)	36,444	13,828	14%	1%		12%	0%
Rinker (040321)	20,481	19,434	13%	5%	2%	5%	0%
Deer Creek (050201)	41,881	41,615	11%	3%	4%	4%	0%
Jim Creek (050109)	30,690	29,514	11%	3%	2%	7%	0%
North Fork Snoqualmie (070311)	66,707	64,395	11%	1%	3%	7%	0%
Cavanaugh (050316)	29,722	28,792	11%	7%		4%	0%
Hazel (050203)	24,179	23,812	11%	5%	3%	2%	0%
Stimson Hill (050215)	18,833	17,449	10%	4%		6%	0%
Hilt (040322)	12,453	12,152	10%	1%	5%	4%	0%
Jackman (040529)	16,399	16,255	10%	1%	3%	6%	0%
Lummi Island (010617)	5,063	4,109	10%	0%		9%	0%
Corkindale (040531)	24,194	23,228	10%	1%	5%	4%	0%

Table E-4. Percent of the Forested Area in Each Watershed in the Small-Diameter, Open Forest Condition Class^{1/}

Watershed Name (and Number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Sultan River (070224)	24,388	22,591	9%	4%	1%	3%	0%
Silverton (050106)	46,399	43,646	9%	0%	8%	1%	0%
East Shannon (040436)	34,065	30,874	9%	3%	2%	4%	0%
Marmot Ridge (010306)	31,794	26,657	7%	2%	3%	2%	0%
Tenas (040319)	36,688	35,609	7%	2%	4%	1%	0%
Jordan-Boulder (040224)	32,726	31,796	7%	1%	1%	4%	0%
French Boulder (050204)	45,327	42,831	6%	2%	3%	1%	0%
Cypress (030415)	4,950	4,825	2%	2%		0%	
Planning Unit Average			16%	4%	2%	9%	0%
Olympic Experimental State Forest							
Hoh Lowlands (200608)	30,244	28,838	21%	5%	0%	16%	1%
Pysht River (190204)	32,972	32,676	20%	1%	3%	16%	0%
Lower Clearwater (210114)	45,246	44,771	20%	7%	0%	12%	1%
Queets Corridor North (210213)	39,496	37,320	18%	5%	5%	3%	9%
Sol Duc Valley (200201)	47,220	44,780	17%	5%	7%	4%	0%
Middle Hoh (200607)	46,272	44,758	17%	11%	0%	6%	0%
West Dickey (200419)	28,311	27,784	16%	2%		14%	0%
Kalaloch Ridge (210115)	11,472	11,410	15%	8%	0%	7%	0%
Hoko (190302)	44,534	44,167	15%	3%	0%	12%	0%
East Dickey (200418)	26,657	26,635	15%	7%		8%	0%
Matheney-Salmon (210211)	21,630	21,378	14%	3%	3%	0%	16%
Upper Clearwater (210116)	58,265	57,986	13%	12%	0%	0%	0%
Sol Duc Valley (200316)	16,585	14,408	13%	4%	1%	8%	0%
Cedar (200609)	12,310	12,238	13%	5%	1%	7%	0%
Clallam River (190303)	22,235	21,407	12%	7%	0%	5%	0%
Goodman-Mosquito (200610)	33,529	33,427	10%	4%	0%	6%	0%
Sol Duc Lowlands (200416)	22,368	21,077	10%	2%	1%	6%	0%
Queets Corridor South (210212)	29,667	29,275	10%	4%	6%		
Quillayute Bottom (200417)	23,180	21,898	10%	2%	0%	6%	1%
Bogachiel (200412)	44,993	44,021	9%	3%	1%	6%	0%
Sekiu Coastal (190301)	27,412	27,309	9%	1%		7%	2%
Ozette Lake (200120)	35,130	34,895	7%	1%	0%	6%	0%
Rain Forest (200505)	56,435	52,643	3%	2%	1%	0%	0%
Planning Unit Average			13%	4%	1%	7%	1%
South Coast Planning Unit							
Mox Chehalis (220106)	23,315	18,778	22%	6%		16%	0%
Mill Creek (240305)	15,699	15,508	21%	15%		7%	0%
Rock-Jones (230116)	22,917	20,045	20%	6%		14%	0%
Lincoln Creek (230219)	48,086	40,597	20%	7%		13%	0%
Bunker Creek (230218)	22,788	21,126	20%	7%		13%	0%
Garrard Creek (230220)	49,056	41,682	20%	9%		10%	0%
Curtis (230112)	43,351	37,274	19%	4%		15%	0%
Scatter Creek (230403)	31,680	15,813	17%	3%		14%	0%
Porter Creek (230522)	32,023	30,994	17%	14%		2%	0%
Willapa Headwaters (240306)	62,581	58,273	16%	6%		10%	0%
Lower Willapa (240315)	32,329	23,097	16%	1%		15%	0%
Elk Creek (230117)	38,773	37,975	16%	5%		10%	1%

Table E-4. Percent of the Forested Area in Each Watershed in the Small-Diameter, Open Forest Condition Class^{1/}

Watershed Name (and Number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Waddel Creek (230501)	28,982	25,600	15%	11%		4%	0%
Lower Skookumchuck (230404)	44,616	33,729	15%	4%		11%	0%
North River Headwaters (24040)	34,532	33,558	14%	1%		13%	0%
Cedar Creek (230521)	32,505	29,481	14%	11%		2%	0%
Lower Naselle (240108)	36,688	34,540	14%	1%	0.1%	12%	0%
Naselle Headwaters (240107)	48,336	47,324	12%	1%		11%	0%
Elk River (220625)	32,340	29,390	12%	2%		7%	3%
Palix (240213)	35,825	34,395	9%	2%		7%	0%
Nemah (240212)	40,522	39,754	9%	1%		8%	0%
Joe-Moclips (210408)	50,805	50,028	9%	1%		4%	8%
Copalis River (210407)	40,529	39,032	9%	1%		7%	1%
South Fork Willapa (240314)	26,664	25,538	8%	3%		5%	0%
Planning Unit Average			15%	5%	0.0%	10%	0.7%
South Puget Planning Unit							
East Creek (110113)	14,429	13,514	31%	9%	5%	16%	0%
Ashford (110104)	27,680	25,170	27%	9%	4%	13%	1%
Mineral Creek (110110)	23,047	22,885	27%	7%		20%	1%
Howard Hansen (090103)	46,472	45,732	26%	9%	0.0%	12%	5%
Busy Wild (110204)	56,966	55,477	23%	6%		17%	1%
North Fork Mineral (110112)	16,072	16,070	23%	19%		3%	0%
Catt (110108)	13,279	13,240	21%	13%	8%	0%	0%
Cumberland (090202)	26,260	24,347	21%	2%		18%	1%
Reese Creek (110106)	5,036	4,991	20%	20%		0%	0%
Summit Lake (140002)	29,140	26,337	20%	6%		13%	0%
Tiger (080303)	40,881	32,948	19%	5%		12%	3%
Squaxin (140003)	1,066	1,040	19%	6%		0%	27%
North Fork Green (090104)	18,410	18,335	18%	6%		10%	2%
Olympia (130202)	18,529	14,863	18%	4%		13%	1%
Hood (150201)	145,611	129,375	14%	2%	0.4%	10%	2%
Planning Unit Average			22%	8%	1%	10%	3%
Straits Planning Unit							
Chimakum (170203)	28,202	22,477	30%	2%	1%	26%	1%
Dabob (170106)	16,871	16,660	28%	8%		20%	1%
Ludlow (170104)	22,897	21,543	28%	2%	0.0%	26%	0%
Salt (190108)	26,336	22,900	21%	8%		12%	1%
Twins (190206)	20,351	20,288	20%	12%	5%	3%	0%
Lyre (190107)	11,021	10,813	19%	11%	1%	7%	0%
Thorndike (170105)	16,587	16,374	19%	2%	1%	15%	1%
Discovery Bay (170202)	58,871	54,002	17%	3%	1%	12%	0%
Little Quil (170107)	28,536	27,161	17%	3%	2%	12%	0%
Port Angeles (180211)	24,883	16,437	15%	4%	1%	9%	0%
Siebert McDonald (180202)	35,481	29,862	14%	3%	1%	10%	0%
Sequim Bay (170201)	26,752	24,339	13%	5%	2%	6%	0%
Dungeness Valley (180103)	43,200	27,406	12%	3%	3%	7%	0%
Bell Creek (180104)	5,969	2,185	10%	0%		10%	0%
Sutherland-Aldwell (180310)	35,109	31,830	9%	2%	2%	4%	1%
Lilliwaup (160204)	29,080	28,383	8%	4%	1%	4%	0%

Table E-4. Percent of the Forested Area in Each Watershed in the Small-Diameter, Open Forest Condition Class^{1/}

Watershed Name (and Number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Big Quil (170108)	51,823	47,083	6%	2%	2%	3%	0%
Hamma Hamma (160203)	69,941	63,458	4%	1%	2%	1%	0%
Planning Unit Average			16%	4%	1%	10%	0.4%

1/ Interagency Vegetation Mapping Project data do not identify Stand Development Stages; for this analysis, stands identified as having conifer cover less than 70% and a Quadratic Mean Diameter less than 10 inches are classified as small-diameter, open forests, which can be used as an approximation of the Ecosystem Initiation stage.

2/ Includes areas identified by Interagency Vegetation Mapping Project data as "vegetation," "<70% veg," "<30% conifer," or "100% veg." Stands in the latter three classes could not be assigned size classes, and therefore were not grouped into forest condition classes. Approximately 70% of forested areas were identified as "vegetation" and grouped into forest condition classes.

3/ Equals acres of small/open forest divided by total forested acres in the watershed.

4/ Equals the amount of small/open forest on each ownership class, divided by total forested acres in the watershed.

5/ Includes privately owned industrial and non-industrial (i.e., small landowner) lands.

6/ Includes municipal, tribal, non-DNR State lands, and other lands.

Table E-5. Percent of the Forested Area in Each Watershed in the Medium- to Large-Diameter and Closed Forest Condition Class^{1/}

Watershed Name (and number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Columbia Planning Unit							
Siouxon (270305)	39,066	38,827	71%	25%	46%	0%	0%
South Fork Grays River (25030)	16,774	16,193	66%	18%		47%	0%
Wind River (290414)	30,669	29,091	61%	6%	46%	7%	1%
Cold Creek (270509)	21,281	18,899	60%	51%	2%	7%	0%
Upper Washougal (280205)	31,719	31,708	59%	46%	6%	7%	1%
Cedar Creek (260428)	14,441	14,072	57%	4%		51%	2%
South Fork Toutle (260513)	42,623	41,212	57%	15%		41%	0%
Rock Creek (290415)	41,733	39,142	56%	28%	14%	14%	1%
West Fork Grays River (250311)	10,347	10,188	53%	11%		42%	0%
Cougar (270317)	32,888	29,908	53%	26%	21%	6%	0%
Middle Kalama (270114)	51,534	50,826	51%	4%		47%	0%
Swift Creek (270304)	74,150	66,002	49%	5%	22%	22%	0%
Salmon Creek (260421)	43,837	36,964	49%	6%		41%	1%
Rock Creek Clark (270508)	35,440	34,297	48%	10%	13%	24%	1%
Winston (260320)	28,321	27,909	48%	15%		31%	2%
North Elochoman (250203)	23,518	23,222	48%	12%		36%	0%
Abernethy (250104)	40,071	38,700	47%	32%	0%	13%	2%
Grays Bay (250310)	56,613	43,943	46%	8%		39%	0%
Lake Merwin (270415)	46,439	40,524	45%	24%	0%	21%	0%
Lacamas (280202)	41,185	20,775	44%	11%	9%	21%	3%
Green River (260515)	46,383	46,092	43%	2%		39%	2%
Hamilton Creek (280106)	32,845	31,299	43%	12%	11%	13%	7%
Skamokawa (250209)	51,687	44,179	42%	13%	0%	28%	1%
Main Elochoman (250208)	37,009	26,884	42%	21%	1%	19%	1%
Upper SF Toutle (260508)	40,031	38,141	41%	9%	7%	24%	1%
Little Washougal (280203)	30,269	22,282	41%	18%	0%	23%	0%
North Fork Toutle (260514)	41,051	37,985	40%	18%		22%	1%
Silverstar (280204)	32,719	31,912	37%	15%	2%	19%	1%
Olequa (260626)	35,017	22,162	34%	5%		29%	0%
Lower Kalama (270113)	49,823	43,903	34%	3%		30%	1%
Mill Creek (260429)	26,163	20,431	32%	8%		24%	0%
Bremer (260331)	19,894	19,253	29%	7%	5%	17%	1%
Stillwater (260625)	28,905	27,450	29%	4%		25%	0%
Cedar Creek (270416)	36,416	31,133	28%	6%	0%	22%	1%
Woodland (270412)	37,827	23,086	28%	12%	0%	16%	0%
Delameter (260623)	37,243	33,641	25%	3%		22%	0%
Harmony (260330)	22,546	12,574	16%	6%		9%	1%
Spirit Lake (260507)	52,151	34,924	7%	3%	4%	0%	0%
Planning Unit Average			44%	14%	6%	24%	1%
North Puget Planning Unit							
Cypress (030415)	4,950	4,825	92%	83%		8%	0%
Lummi Island (010617)	5,063	4,109	73%	13%	0%	45%	15%
Sultan River (070224)	24,388	22,591	67%	47%	4%	8%	9%
Loretta (030104)	15,769	15,010	61%	5%	25%	30%	0%
Cavanaugh (050316)	29,722	28,792	58%	42%		16%	0%
Marmot Ridge (010306)	31,794	26,657	57%	11%	38%	9%	0%

Table E-5. Percent of the Forested Area in Each Watershed in the Medium- to Large-Diameter and Closed Forest Condition Class^{1/}

Watershed Name (and number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Tolt (070415)	63,357	60,617	56%	5%	7%	38%	7%
Deer Creek (050201)	41,881	41,615	55%	10%	30%	15%	0%
Jim Creek (050109)	30,690	29,514	55%	12%	13%	27%	3%
Hilt (040322)	12,453	12,152	53%	4%	25%	23%	0%
Clearwater Creek (010328)	14,330	14,277	53%	23%	28%	2%	0%
Olney Creek (070225)	20,655	18,579	53%	27%		25%	1%
Warnick (010229)	25,436	24,817	53%	40%	1%	12%	0%
Pilchuck Mtn (070226)	42,517	40,350	52%	41%	0%	10%	1%
North Fork Snoqualmie (07031)	66,707	64,395	52%	4%	18%	28%	2%
Wallace River (070217)	24,667	23,219	50%	21%	14%	11%	4%
Upper NF Stilly (050202)	32,833	32,818	50%	6%	39%	4%	0%
Youngs Creek (070219)	23,776	21,907	50%	7%	1%	42%	0%
Canyon Creek (010232)	36,807	36,235	49%	6%	28%	15%	0%
Day Creek (030105)	22,203	22,077	49%	5%	6%	39%	0%
Hutchinson Creek (010310)	13,975	13,525	49%	18%		31%	0%
Stimson Hill (050215)	18,833	17,449	48%	29%		19%	0%
Lake Whatcom (010412)	35,957	28,708	48%	31%		17%	0%
East Shannon (040436)	34,065	30,874	48%	6%	33%	9%	0%
Corkindale (040531)	24,194	23,228	47%	3%	36%	7%	1%
Raging River (070408)	22,853	21,307	47%	20%		26%	1%
Sumas River (010125)	36,444	13,828	47%	18%		29%	0%
Gilligan (030106)	18,879	17,089	46%	11%		33%	2%
Verlot (050107)	23,540	21,900	45%	4%	31%	10%	0%
Howard Creek (010308)	39,040	38,766	45%	9%	5%	29%	2%
Skookum Creek (010309)	23,905	23,675	44%	15%	3%	27%	0%
Jordan-Boulder (040224)	32,726	31,796	43%	11%	14%	17%	0%
Ebey Hill (050214)	19,812	15,819	43%	24%		19%	0%
Samish Bay (010414)	13,258	10,390	43%	20%		13%	10%
Tenas (040319)	36,688	35,609	42%	6%	32%	5%	0%
Lower MF Snoqualmie (070307)	28,375	26,901	42%	24%	12%	6%	0%
Spada (070216)	44,197	40,479	42%	29%	9%	1%	3%
Hazel (050203)	24,179	23,812	42%	16%	20%	5%	0%
Porter Canyon (010327)	18,550	18,139	42%	17%		20%	5%
French Boulder (050204)	45,327	42,831	42%	8%	29%	4%	0%
Acme (010311)	23,518	18,723	42%	19%		23%	0%
Nookachamps (030107)	47,730	38,077	41%	23%		18%	0%
South Snoqualmie (070306)	57,077	53,758	41%	7%	22%	6%	6%
Silverton (050106)	46,399	43,646	41%	3%	37%	1%	0%
Jackman (040529)	16,399	16,255	41%	2%	21%	17%	0%
Rinker (040321)	20,481	19,434	39%	19%	6%	13%	1%
Jordan (050108)	21,252	17,364	38%	6%	1%	30%	1%
Tate (070409)	9,798	7,772	37%	4%		34%	0%
Cherry (070420)	38,183	31,531	37%	12%		25%	0%
Sauk Prairie (040320)	14,137	13,412	36%	12%	10%	14%	0%
Vedder (010131)	21,272	17,850	35%	5%	0%	30%	0%
Woods Creek (070223)	42,463	35,484	33%	14%		18%	1%
Alder (030103)	22,865	20,294	33%	26%		7%	0%

Table E-5. Percent of the Forested Area in Each Watershed in the Medium- to Large-Diameter and Closed Forest Condition Class^{1/}

Watershed Name (and number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Samish River (030301)	57,397	33,587	33%	14%		19%	1%
Friday Creek (030313)	24,129	20,498	33%	10%		21%	1%
Deming (010226)	27,527	23,676	33%	18%		15%	0%
Kenney Creek (010230)	2,791	2,633	31%	2%		29%	0%
Lower Pilchuck Creek (050313)	19,364	17,101	30%	2%		28%	0%
West Shannon (040435)	14,333	13,458	27%	8%	3%	16%	0%
Hansen Creek (030102)	29,010	20,993	27%	6%		21%	0%
Grandy (040534)	18,856	17,804	22%	7%		15%	0%
Planning Unit Average			45%	16%	10%	19%	1%
Olympic Experimental State Forest							
Sekiu Coastal (190301)	27,412	27,309	74%	8%		62%	4%
Clallam River (190303)	22,235	21,407	64%	36%	0%	28%	0%
Hoko (190302)	44,534	44,167	62%	15%	0%	45%	1%
Kalaloch Ridge (210115)	11,472	11,410	58%	31%	5%	21%	0%
Goodman-Mosquito (200610)	33,529	33,427	57%	18%	8%	31%	0%
Sol Duc Valley (200316)	16,585	14,408	56%	20%	9%	26%	1%
Sol Duc Valley (200201)	47,220	44,780	55%	18%	27%	8%	1%
Matheney-Salmon (210211)	21,630	21,378	55%	10%	19%	1%	25%
Sol Duc Lowlands (200416)	22,368	21,077	54%	11%	10%	31%	1%
Queets Corridor South (210212)	29,667	29,275	51%	11%	40%		
Lower Clearwater (210114)	45,246	44,771	50%	23%	2%	24%	1%
Bogachiel (200412)	44,993	44,021	49%	21%	10%	17%	1%
Cedar (200609)	12,310	12,238	49%	19%	12%	18%	0%
Ozette Lake (200120)	35,130	34,895	48%	8%	23%	17%	1%
West Dickey (200419)	28,311	27,784	48%	6%		41%	0%
Upper Clearwater (210116)	58,265	57,986	46%	45%	1%	0%	0%
Rain Forest (200505)	56,435	52,643	46%	6%	41%	0%	0%
Middle Hoh (200607)	46,272	44,758	46%	36%	1%	9%	0%
East Dickey (200418)	26,657	26,635	45%	25%		20%	0%
Hoh Lowlands (200608)	30,244	28,838	43%	12%	2%	28%	1%
Queets Corridor North (210213)	39,496	37,320	40%	14%	17%	2%	7%
Quillayute Bottom (200417)	23,180	21,898	40%	14%	10%	13%	3%
Pysht River (190204)	32,972	32,676	31%	3%	9%	19%	0%
Planning Unit Average			51%	18%	11%	20%	2%
South Coast Planning Unit							
Palix (240213)	35,825	34,395	75%	6%		66%	3%
Nemah (240212)	40,522	39,754	74%	24%		49%	1%
South Fork Willapa (240314)	26,664	25,538	71%	29%		40%	3%
Elk River (220625)	32,340	29,390	63%	8%		32%	23%
Cedar Creek (230521)	32,505	29,481	58%	56%		1%	1%
Porter Creek (230522)	32,023	30,994	58%	56%		2%	0%
Elk Creek (230117)	38,773	37,975	57%	21%		35%	2%
Naselle Headwaters (240107)	48,336	47,324	53%	7%		46%	0%
Lower Naselle (240108)	36,688	34,540	53%	13%	0%	39%	0%
North River Headwaters (240408)	34,532	33,558	52%	8%		44%	0%
Joe-Moclips (210408)	50,805	50,028	52%	4%	0%	24%	24%
Copalis River (210407)	40,529	39,032	51%	3%		34%	14%

Table E-5. Percent of the Forested Area in Each Watershed in the Medium- to Large-Diameter and Closed Forest Condition Class^{1/}

Watershed Name (and number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Willapa Headwaters (240306)	62,581	58,273	45%	16%		28%	0%
Bunker Creek (230218)	22,788	21,126	41%	17%		24%	0%
Waddel Creek (230501)	28,982	25,600	41%	37%		4%	0%
Mill Creek (240305)	15,699	15,508	40%	33%		7%	0%
Lower Willapa (240315)	32,329	23,097	40%	3%		36%	0%
Rock-Jones (230116)	22,917	20,045	39%	17%		21%	1%
Lincoln Creek (230219)	48,086	40,597	38%	19%		19%	0%
Garrard Creek (230220)	49,056	41,682	38%	22%		16%	0%
Curtis (230112)	43,351	37,274	36%	11%		24%	1%
Mox Chehalis (220106)	23,315	18,778	35%	14%		21%	0%
Scatter Creek (230403)	31,680	15,813	31%	5%		25%	1%
Lower Skookumchuck (230404)	44,616	33,729	30%	13%		17%	0%
Planning Unit Average			49%	18%	0.0%	27%	3.1%
South Puget Planning Unit							
Squaxin (140003)	1,066	1,040	70%	13%		0%	57%
North Fork Mineral (110112)	16,072	16,070	64%	57%		6%	1%
Catt (110108)	13,279	13,240	61%	33%	29%	0%	0%
Reese Creek (110106)	5,036	4,991	61%	60%		1%	0%
Hood (150201)	145,611	129,375	60%	20%	2%	33%	5%
North Fork Green (090104)	18,410	18,335	56%	18%		29%	8%
Busy Wild (110204)	56,966	55,477	49%	18%		27%	4%
Mineral Creek (110110)	23,047	22,885	45%	9%		33%	3%
Howard Hansen (090103)	46,472	45,732	44%	19%	1%	20%	4%
Tiger (080303)	40,881	32,948	41%	19%		17%	6%
Summit Lake (140002)	29,140	26,337	41%	19%		22%	0%
Ashford (110104)	27,680	25,170	41%	14%	17%	8%	1%
Cumberland (090202)	26,260	24,347	36%	8%		23%	5%
East Creek (110113)	14,429	13,514	36%	10%	13%	12%	1%
Olympia (130202)	18,529	14,863	31%	10%		19%	2%
Planning Unit Average			49%	22%	4%	17%	6.5%
Straits Planning Unit							
Lilliwaup (160204)	29,080	28,383	60%	42%	5%	14%	0%
Twins (190206)	20,351	20,288	52%	16%	33%	3%	0%
Sutherland-Aldwell (180310)	35,109	31,830	51%	13%	29.7%	7%	1%
Lyre (190107)	11,021	10,813	50%	32%	7%	10%	0%
Big Quil (170108)	51,823	47,083	50%	4%	42%	3%	0%
Thorndike (170105)	16,587	16,374	49%	5%	2%	42%	1%
Hamma Hamma (160203)	69,941	63,458	46%	13%	29%	5%	0%
Sequim Bay (170201)	26,752	24,339	46%	17%	16%	10%	2%
Siebert McDonald (180202)	35,481	29,862	44%	18%	16%	9%	0%
Port Angeles (180211)	24,883	16,437	40%	18%	10%	11%	1%
Discovery Bay (170202)	58,871	54,002	40%	7%	13%	15%	4%
Dabob (170106)	16,871	16,660	36%	15%		20%	1%
Dungeness Valley (180103)	43,200	27,406	36%	9%	19%	7%	1%
Salt (190108)	26,336	22,900	35%	21%		12%	2%
Little Quil (170107)	28,536	27,161	34%	3%	24%	7%	0%
Ludlow (170104)	22,897	21,543	30%	4%		26%	0%

Table E-5. Percent of the Forested Area in Each Watershed in the Medium- to Large-Diameter and Closed Forest Condition Class^{1/}

Watershed Name (and number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Chimakum (170203)	28,202	22,477	29%	3%	5%	19%	3%
Bell Creek (180104)	5,969	2,185	28%	7%		20%	1%
<i>Planning Unit Average</i>			<i>42%</i>	<i>14%</i>	<i>14%</i>	<i>13%</i>	<i>1%</i>

1/ Interagency Vegetation Mapping Project data do not identify Stand Development Stages; for this analysis, stands identified as having a Quadratic Mean Diameter between 10 and 30 inches, plus those with a Quadratic Mean Diameter less than 10 inches and conifer cover greater than 70%, are classified as medium/large/closed forest, which can be used as an approximation of the Competitive Exclusion stages.

2/ Includes areas identified by Interagency Vegetation Mapping Project data as "vegetation," "<70% veg," "<30% conifer," or "100% veg." Stands in the latter three classes could not be assigned size classes, and therefore were not grouped into forest condition classes. Approximately 70% of forested areas were identified as "vegetation" and grouped into forest condition classes.

3/ Equals acres of medium/large/closed forest divided by total forested acres in the watershed.

4/ Equals the amount of medium/large/closed forest on each ownership class, divided by total forested acres in the watershed.

5/ Includes privately owned industrial and non-industrial (i.e., small landowner) lands.

6/ Includes municipal, tribal, non-DNR State lands, and other lands.

Table E-6. Percent of the Forested Area in Each Watershed in the Very Large Diameter Forest Condition Class^{1/}

Watershed Name (and number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Columbia Planning Unit							
Grays Bay (250310)	56,613	43,943	0%	0%		0%	0%
Cedar Creek (260428)	14,441	14,072	0%	0%		0%	0%
Skamokawa (250209)	51,687	44,179	0%	0%	0%	0%	0%
South Fork Grays River (25030)	16,774	16,193	0%	0%		0%	0%
Delameter (260623)	37,243	33,641	0%	0%		0%	0%
Salmon Creek (260421)	43,837	36,964	0%	0%		0%	0%
Mill Creek (260429)	26,163	20,431	0%	0%		0%	0%
Stillwater (260625)	28,905	27,450	0%	0%		0%	0%
West Fork Grays River (250311)	10,347	10,188	1%	0%		0%	
Harmony (260330)	22,546	12,574	1%	0%		0%	0%
Olequa (260626)	35,017	22,162	1%	0%		0%	0%
Green River (260515)	46,383	46,092	1%	0%		1%	0%
Lower Kalama (270113)	49,823	43,903	1%	0%		1%	0%
North Fork Toutle (260514)	41,051	37,985	1%	0%		0%	0%
Winston (260320)	28,321	27,909	1%	1%		0%	0%
Main Elochoman (250208)	37,009	26,884	1%	1%	0%	0%	0%
South Fork Toutle (260513)	42,623	41,212	1%	1%		1%	0%
Abernethy (250104)	40,071	38,700	1%	1%	0%	0%	0%
North Elochoman (250203)	23,518	23,222	2%	0%		1%	0%
Middle Kalama (270114)	51,534	50,826	2%	1%		1%	0%
Woodland (270412)	37,827	23,086	2%	2%	0%	1%	0%
Bremer (260331)	19,894	19,253	2%	1%	1%	1%	0%
Cedar Creek (270416)	36,416	31,133	3%	0%	0%	2%	0%
Spirit Lake (260507)	52,151	34,924	3%	0%	2%	0%	0%
Hamilton Creek (280106)	32,845	31,299	3%	1%	1%	1%	1%
Rock Creek Clark (270508)	35,440	34,297	4%	1%	1%	2%	0%
Silverstar (280204)	32,719	31,912	5%	2%	0%	2%	0%
Rock Creek (290415)	41,733	39,142	6%	2%	1%	3%	0%
Upper Washougal (280205)	31,719	31,708	6%	5%	0%	1%	0%
Upper SF Toutle (260508)	40,031	38,141	6%	1%	4%	1%	0%
Lacamas (280202)	41,185	20,775	6%	3%	1%	2%	1%
Swift Creek (270304)	74,150	66,002	7%	1%	5%	1%	0%
Lake Merwin (270415)	46,439	40,524	7%	4%	0%	3%	0%
Cold Creek (270509)	21,281	18,899	7%	6%	0%	1%	0%
Little Washougal (280203)	30,269	22,282	9%	4%	0%	5%	0%
Siouxon (270305)	39,066	38,827	10%	5%	6%	0%	0%
Wind River (290414)	30,669	29,091	12%	1%	10%	1%	0%
Cougar (270317)	32,888	29,908	16%	5%	9%	2%	0%
Planning Unit Average			3.4%	1.3%	1.1%	1.0%	0.1%
North Puget Planning Unit							
Lower Pilchuck Creek (050313)	19,364	17,101	0%	0%		0%	
Friday Creek (030313)	24,129	20,498	0%	0%		0%	0%
Nookachamps (030107)	47,730	38,077	0%	0%		0%	0%
Samish Bay (010414)	13,258	10,390	0%	0%		0%	0%
Samish River (030301)	57,397	33,587	0%	0%		0%	0%
Lummi Island (010617)	5,063	4,109	0%	0%		0%	0%
Cypress (030415)	4,950	4,825	0%	0%		0%	0%

Table E-6. Percent of the Forested Area in Each Watershed in the Very Large Diameter Forest Condition Class^{1/}

Watershed Name (and number)	Percent of						
	Total Acres	Forested Acres ^{2/}	Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Hansen Creek (030102)	29,010	20,993	0%	0%		0%	
Lake Whatcom (010412)	35,957	28,708	0%	0%		0%	0%
Sumas River (010125)	36,444	13,828	1%	0%		0%	0%
Kenney Creek (010230)	2,791	2,633	1%	0%		1%	
Woods Creek (070223)	42,463	35,484	1%	0%		0%	0%
Deming (010226)	27,527	23,676	1%	0%		0%	0%
Hutchinson Creek (010310)	13,975	13,525	1%	0%		0%	0%
Gilligan (030106)	18,879	17,089	1%	0%		1%	0%
Skookum Creek (010309)	23,905	23,675	1%	0%	0%	1%	0%
Tate (070409)	9,798	7,772	1%	0%		1%	0%
Porter Canyon (010327)	18,550	18,139	1%	1%		0%	0%
Cherry (070420)	38,183	31,531	1%	1%		1%	0%
Vedder (010131)	21,272	17,850	1%	0%	0%	1%	0%
Warnick (010229)	25,436	24,817	2%	1%	0%	0%	
Acme (010311)	23,518	18,723	2%	1%		1%	0%
Grandy (040534)	18,856	17,804	2%	0%		2%	0%
Day Creek (030105)	22,203	22,077	2%	0%	1%	1%	0%
Jordan (050108)	21,252	17,364	3%	0%	0%	2%	0%
Howard Creek (010308)	39,040	38,766	3%	0%	1%	1%	0%
Raging River (070408)	22,853	21,307	3%	1%		2%	0%
Cavanaugh (050316)	29,722	28,792	3%	1%		2%	0%
Stimson Hill (050215)	18,833	17,449	3%	2%		1%	0%
Alder (030103)	22,865	20,294	3%	2%		1%	0%
Loretta (030104)	15,769	15,010	4%	0%	3%	1%	0%
Youngs Creek (070219)	23,776	21,907	4%	1%	0%	3%	0%
Ebey Hill (050214)	19,812	15,819	5%	3%		2%	0%
Canyon Creek (010232)	36,807	36,235	5%	0%	5%	0%	0%
Clearwater Creek (010328)	14,330	14,277	5%	1%	4%	0%	0%
West Shannon (040435)	14,333	13,458	6%	1%	3%	1%	0%
Sultan River (070224)	24,388	22,591	6%	3%	2%	0%	1%
Jim Creek (050109)	30,690	29,514	6%	2%	2%	1%	0%
Marmot Ridge (010306)	31,794	26,657	6%	0%	6%	0%	0%
Tolt (070415)	63,357	60,617	8%	1%	4%	3%	1%
Olney Creek (070225)	20,655	18,579	10%	7%		3%	0%
Hazel (050203)	24,179	23,812	10%	2%	7%	1%	0%
Deer Creek (050201)	41,881	41,615	10%	1%	8%	1%	0%
Pilchuck Mtn (070226)	42,517	40,350	10%	9%	0%	1%	0%
Rinker (040321)	20,481	19,434	12%	7%	3%	2%	0%
Sauk Prairie (040320)	14,137	13,412	13%	6%	5%	2%	0%
Hilt (040322)	12,453	12,152	15%	2%	10%	4%	0%
Corkindale (040531)	24,194	23,228	16%	1%	11%	1%	2%
Upper NF Stilly (050202)	32,833	32,818	16%	0%	16%	0%	0%
Lower MF Snoqualmie (070307)	28,375	26,901	16%	7%	6%	2%	0%
South Snoqualmie (070306)	57,077	53,758	17%	1%	12%	2%	1%
Wallace River (070217)	24,667	23,219	18%	3%	12%	3%	1%
Jordan-Boulder (040224)	32,726	31,796	19%	4%	12%	3%	0%
North Fork Snoqualmie (070311)	66,707	64,395	21%	1%	17%	2%	0%
Jackman (040529)	16,399	16,255	21%	0%	20%	1%	0%

Table E-6. Percent of the Forested Area in Each Watershed in the Very Large Diameter Forest Condition Class^{1/}

Watershed Name (and number)	Percent of						
	Total Acres	Forested Acres ^{2/}	Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
French Boulder (050204)	45,327	42,831	23%	2%	20%	1%	0%
Spada (070216)	44,197	40,479	23%	15%	7%	0%	1%
Verlot (050107)	23,540	21,900	23%	1%	20%	2%	0%
East Shannon (040436)	34,065	30,874	25%	0%	25%	1%	0%
Tenas (040319)	36,688	35,609	30%	3%	26%	1%	0%
Silverton (050106)	46,399	43,646	37%	2%	35%	0%	0%
Planning Unit Average			7.9%	1.7%	5.0%	1.1%	0.2%
Olympic Experimental State Forest							
West Dickey (200419)	28,311	27,784	1%	0%		1%	0%
Sekiu Coastal (190301)	27,412	27,309	2%	0%		2%	0%
Hoko (190302)	44,534	44,167	2%	1%	0%	1%	0%
East Dickey (200418)	26,657	26,635	2%	1%		1%	0%
Pysht River (190204)	32,972	32,676	2%	0%	1%	1%	0%
Hoh Lowlands (200608)	30,244	28,838	3%	1%	2%	0%	0%
Clallam River (190303)	22,235	21,407	4%	2%	0%	1%	0%
Lower Clearwater (210114)	45,246	44,771	4%	3%	1%	0%	0%
Sol Duc Valley (200201)	47,220	44,780	4%	1%	2%	1%	0%
Quillayute Bottom (200417)	23,180	21,898	4%	2%	2%	0%	0%
Ozette Lake (200120)	35,130	34,895	5%	1%	3%	0%	0%
Goodman-Mosquito (200610)	33,529	33,427	5%	2%	2%	0%	0%
Cedar (200609)	12,310	12,238	5%	1%	3%	1%	0%
Sol Duc Lowlands (200416)	22,368	21,077	7%	1%	3%	2%	0%
Kalaloch Ridge (210115)	11,472	11,410	7%	5%	2%	0%	0%
Middle Hoh (200607)	46,272	44,758	8%	7%	1%	0%	0%
Bogachiel (200412)	44,993	44,021	8%	3%	5%	0%	0%
Sol Duc Valley (200316)	16,585	14,408	8%	2%	6%	1%	0%
Matheney-Salmon (210211)	21,630	21,378	12%	0%	6%	0%	6%
Upper Clearwater (210116)	58,265	57,986	13%	13%	0%	0%	0%
Queets Corridor North (210213)	39,496	37,320	14%	4%	10%	0%	0%
Queets Corridor South (210212)	29,667	29,275	21%	1%	20%		
Rain Forest (200505)	56,435	52,643	44%	1%	42%	0%	0%
Planning Unit Average			8.0%	2.3%	4.8%	0.6%	0.3%
South Coast Planning Unit							
Elk River (220625)	32,340	29,390	0%	0%		0%	0%
Lower Willapa (240315)	32,329	23,097	0%	0%		0%	0%
Elk Creek (230117)	38,773	37,975	0%	0%		0%	0%
Mill Creek (240305)	15,699	15,508	0%	0%		0%	0%
Garrard Creek (230220)	49,056	41,682	0%	0%		0%	0%
Rock-Jones (230116)	22,917	20,045	0%	0%		0%	0%
Nemah (240212)	40,522	39,754	0%	0%		0%	0%
Palix (240213)	35,825	34,395	0%	0%		0%	0%
North River Headwaters (24040)	34,532	33,558	0%	0%		0%	
Cedar Creek (230521)	32,505	29,481	0%	0%		0%	0%
South Fork Willapa (240314)	26,664	25,538	0%	0%		0%	0%
Mox Chehalis (220106)	23,315	18,778	0%	0%		0%	
Porter Creek (230522)	32,023	30,994	0%	0%		0%	
Willapa Headwaters (240306)	62,581	58,273	0%	0%		0%	0%
Lower Naselle (240108)	36,688	34,540	0%	0%	0%	0%	0%

Table E-6. Percent of the Forested Area in Each Watershed in the Very Large Diameter Forest Condition Class^{1/}

Watershed Name (and number)	Total Acres	Forested Acres ^{2/}	Percent of Forested Land in Class ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Lincoln Creek (230219)	48,086	40,597	0%	0%		0%	0%
Naselle Headwaters (240107)	48,336	47,324	0%	0%		0%	0%
Lower Skookumchuck (230404)	44,616	33,729	0%	0%		0%	0%
Bunker Creek (230218)	22,788	21,126	0%	0%		0%	0%
Curtis (230112)	43,351	37,274	0%	0%		0%	0%
Waddel Creek (230501)	28,982	25,600	1%	0%		0%	0%
Scatter Creek (230403)	31,680	15,813	1%	0%		1%	0%
Copalis River (210407)	40,529	39,032	2%	0%		1%	0%
Joe-Moclips (210408)	50,805	50,028	3%	0%		1%	2%
Planning Unit Average			0.4%	0.1%	0.0%	0.2%	0.1%
South Puget Planning Unit							
Hood (150201)	145,611	129,375	0%	0%	0%	0%	0%
Summit Lake (140002)	29,140	26,337	0%	0%		0%	0%
Squaxin (140003)	1,066	1,040	1%	0%			0%
Olympia (130202)	18,529	14,863	1%	0%		1%	0%
Busy Wild (110204)	56,966	55,477	1%	0%		0%	0%
Tiger (080303)	40,881	32,948	2%	1%		0%	0%
Reese Creek (110106)	5,036	4,991	2%	2%		0%	
Cumberland (090202)	26,260	24,347	2%	0%		1%	0%
North Fork Mineral (110112)	16,072	16,070	2%	2%		0%	0%
Mineral Creek (110110)	23,047	22,885	2%	1%		1%	0%
Ashford (110104)	27,680	25,170	3%	0%	2%	1%	0%
East Creek (110113)	14,429	13,514	3%	1%	1%	1%	0%
Catt (110108)	13,279	13,240	4%	1%	2%	0%	
North Fork Green (090104)	18,410	18,335	4%	2%		1%	1%
Howard Hansen (090103)	46,472	45,732	4%	2%	0.0%	1%	1%
Planning Unit Average			2.0%	0.8%	0.4%	0.6%	0.2%
Straits Planning Unit							
Chimakum (170203)	28,202	22,477	1%	0%	0%	1%	0%
Dabob (170106)	16,871	16,660	2%	1%		1%	0%
Ludlow (170104)	22,897	21,543	3%	0%		3%	0%
Discovery Bay (170202)	58,871	54,002	3%	1%	1%	1%	0%
Lyre (190107)	11,021	10,813	3%	1%	2%	0%	0%
Twins (190206)	20,351	20,288	3%	0%	3%	0%	0%
Salt (190108)	26,336	22,900	4%	3%		1%	0%
Siebert McDonald (180202)	35,481	29,862	4%	1%	2%	1%	0%
Little Quil (170107)	28,536	27,161	6%	0%	5%	1%	0%
Bell Creek (180104)	5,969	2,185	6%	2%		3%	0%
Thorndike (170105)	16,587	16,374	6%	0%	0%	5%	0%
Sequim Bay (170201)	26,752	24,339	7%	2%	4%	1%	0%
Port Angeles (180211)	24,883	16,437	7%	2%	3%	2%	0%
Lilliwaup (160204)	29,080	28,383	7%	4%	1%	2%	0%
Dungeness Valley (180103)	43,200	27,406	8%	2%	5%	2%	0%
Sutherland-Aldwell (180310)	35,109	31,830	15%	1%	13%	1%	0%
Hamma Hamma (160203)	69,941	63,458	20%	1%	18%	1%	0%
Big Quil (170108)	51,823	47,083	22%	1%	20%	0%	0%
Planning Unit Average			7.1%	1.3%	4.3%	1.5%	0.1%

Table E-6. Percent of the Forested Area in Each Watershed in the Very Large Diameter Forest Condition Class^{1/}

Watershed Name (and number)	Percent of						
	Total	Forested	Forested Land	Percentage Breakdown by Ownership^{4/}			
	Acres	Acres^{2/}	in Class^{3/}	DNR	Federal	Private^{5/}	Other^{6/}

1/ Interagency Vegetation Mapping Project data do not identify Stand Development Stages; for this analysis, stands identified as having a Quadratic Mean Diameter greater than 30 inches are classified as very large forest, and can be used as an approximation of the Structurally Complex stage. Values of "0%" indicate amounts representing less than 0.5 percent of the forested area; blanks indicate zero percent.

2/ Includes areas identified by Interagency Vegetation Mapping Project data as "vegetation," "<70% veg," "<30% conifer," or "100% veg." Stands in the latter three classes could not be assigned size classes, and therefore were not grouped into forest condition classes. Approximately 70% of forested areas were identified as "vegetation" and grouped into forest condition classes.

3/ Equals acres of very large forest divided by total forested acres in the watershed.

4/ Equals the amount of very large forest on each ownership class, divided by total forested acres in the watershed.

5/ Includes privately owned industrial and non-industrial (i.e., small landowner) lands.

6/ Includes municipal, tribal, non-DNR State lands, and other lands.

Table E-7. Percent of Each Watershed in Each Ownership Class

Watershed Name (and number)	Total Acres	Forested Acres ^{1/}	Percentage of Watershed in Each Ownership Class			
			DNR	Federal	Private ^{2/}	Other ^{3/}
Columbia Planning Unit						
Abernethy (250104)	40,071	38,700	53%	0%	41%	5%
Bremer (260331)	19,894	19,253	15%	8%	74%	3%
Cedar Creek (260428)	14,441	14,072	6%		89%	5%
Cedar Creek (270416)	36,416	31,133	11%	0%	86%	2%
Cold Creek (270509)	21,281	18,899	76%	5%	18%	1%
Cougar (270317)	32,888	29,908	36%	37%	26%	0%
Delameter (260623)	37,243	33,641	5%		94%	0%
Grays Bay (250310)	56,613	43,943	9%		76%	15%
Green River (260515)	46,383	46,092	5%		90%	4%
Hamilton Creek (280106)	32,845	31,299	21%	27%	30%	21%
Harmony (260330)	22,546	12,574	5%		91%	4%
Lacamas (280202)	41,185	20,775	9%	7%	80%	4%
Lake Merwin (270415)	46,439	40,524	38%	0%	62%	0%
Little Washougal (280203)	30,269	22,282	23%	0%	74%	3%
Lower Kalama (270113)	49,823	43,903	6%		90%	4%
Main Elochoman (250208)	37,009	26,884	22%	3%	63%	12%
Middle Kalama (270114)	51,534	50,826	9%		91%	1%
Mill Creek (260429)	26,163	20,431	10%		90%	0%
North Elochoman (250203)	23,518	23,222	18%		82%	0%
North Fork Toutle (260514)	41,051	37,985	28%	0%	62%	11%
Olequa (260626)	35,017	22,162	7%		92%	1%
Rock Creek (290415)	41,733	39,142	40%	19%	36%	6%
Rock Creek Clark (270508)	35,440	34,297	16%	25%	58%	1%
Salmon Creek (260421)	43,837	36,964	8%		90%	3%
Silverstar (280204)	32,719	31,912	26%	11%	60%	3%
Siouxon (270305)	39,066	38,827	39%	60%	1%	0%
Skamokawa (250209)	51,687	44,179	21%	2%	68%	8%
South Fork Grays River (25030)	16,774	16,193	28%		72%	0%
South Fork Toutle (260513)	42,623	41,212	21%		77%	2%
Spirit Lake (260507)	52,151	34,924	10%	85%	4%	1%
Stillwater (260625)	28,905	27,450	7%		93%	0%
Swift Creek (270304)	74,150	66,002	10%	40%	49%	1%
Upper SF Toutle (260508)	40,031	38,141	33%	21%	44%	2%
Upper Washougal (280205)	31,719	31,708	68%	13%	18%	1%
West Fork Grays River (250311)	10,347	10,188	18%		82%	0%
Wind River (290414)	30,669	29,091	10%	69%	18%	3%
Winston (260320)	28,321	27,909	24%		73%	3%
Woodland (270412)	37,827	23,086	15%	0%	81%	4%
Planning Unit Average			21.2%	11.4%	63.8%	3.5%
North Puget Planning Unit						
Acme (010311)	23,518	18,723	28%		72%	0%
Alder (030103)	22,865	20,294	54%		46%	1%
Canyon Creek (010232)	36,807	36,235	14%	47%	38%	1%
Cavanaugh (050316)	29,722	28,792	57%		43%	0%
Cherry (070420)	38,183	31,531	19%		78%	2%
Clearwater Creek (010328)	14,330	14,277	51%	43%	6%	1%
Corkindale (040531)	24,194	23,228	5%	60%	30%	5%
Cypress (030415)	4,950	4,825	90%		10%	0%
Day Creek (030105)	22,203	22,077	9%	9%	83%	0%
Deer Creek (050201)	41,881	41,615	18%	52%	30%	0%

Table E-7. Percent of Each Watershed in Each Ownership Class

Watershed Name (and number)	Total Acres	Forested Acres ^{1/}	Percentage of Watershed in Each Ownership Class			
			DNR	Federal	Private ^{2/}	Other ^{3/}
Deming (010226)	27,527	23,676	38%		61%	0%
East Shannon (040436)	34,065	30,874	10%	65%	22%	3%
Ebey Hill (050214)	19,812	15,819	37%		62%	1%
French Boulder (050204)	45,327	42,831	16%	70%	13%	1%
Friday Creek (030313)	24,129	20,498	17%		80%	3%
Gilligan (030106)	18,879	17,089	17%		77%	6%
Grandy (040534)	18,856	17,804	16%		83%	1%
Hansen Creek (030102)	29,010	20,993	13%		84%	4%
Hazel (050203)	24,179	23,812	35%	39%	26%	0%
Hilt (040322)	12,453	12,152	8%	50%	41%	1%
Howard Creek (010308)	39,040	38,766	17%	11%	67%	5%
Hutchinson Creek (010310)	13,975	13,525	37%		63%	0%
Jackman (040529)	16,399	16,255	6%	55%	39%	0%
Jim Creek (050109)	30,690	29,514	22%	20%	54%	4%
Jordan (050108)	21,252	17,364	6%	1%	91%	2%
Jordan-Boulder (040224)	32,726	31,796	24%	40%	35%	1%
Kenney Creek (010230)	2,791	2,633	6%		94%	0%
Lake Whatcom (010412)	35,957	28,708	39%		51%	10%
Loretta (030104)	15,769	15,010	7%	37%	54%	1%
Lower MF Snoqualmie (070307)	28,375	26,901	52%	27%	20%	0%
Lower Pilchuck Creek (050313)	19,364	17,101	6%		93%	1%
Lummi Island (010617)	5,063	4,109	12%	0%	75%	13%
Marmot Ridge (010306)	31,794	26,657	16%	73%	11%	0%
Nookachamps (030107)	47,730	38,077	30%		69%	1%
North Fork Snoqualmie (070311)	66,707	64,395	7%	45%	45%	3%
Olney Creek (070225)	20,655	18,579	39%		59%	2%
Pilchuck Mtn (070226)	42,517	40,350	67%	1%	29%	3%
Porter Canyon (010327)	18,550	18,139	36%		52%	12%
Raging River (070408)	22,853	21,307	30%		68%	2%
Rinker (040321)	20,481	19,434	45%	13%	40%	2%
Samish Bay (010414)	13,258	10,390	29%		59%	12%
Samish River (030301)	57,397	33,587	14%		83%	3%
Sauk Prairie (040320)	14,137	13,412	34%	18%	48%	1%
Silverton (050106)	46,399	43,646	7%	91%	2%	1%
Skookum Creek (010309)	23,905	23,675	25%	12%	62%	0%
South Snoqualmie (070306)	57,077	53,758	10%	55%	24%	11%
Spada (070216)	44,197	40,479	63%	26%	2%	10%
Stimson Hill (050215)	18,833	17,449	41%		58%	0%
Sultan River (070224)	24,388	22,591	56%	7%	25%	12%
Sumas River (010125)	36,444	13,828	9%		90%	0%
Tate (070409)	9,798	7,772	7%		92%	0%
Tenas (040319)	36,688	35,609	15%	76%	9%	0%
Tolt (070415)	63,357	60,617	8%	14%	67%	12%
Upper NF Stilly (050202)	32,833	32,818	10%	80%	10%	0%
Vedder (010131)	21,272	17,850	15%	0%	85%	0%
Verlot (050107)	23,540	21,900	6%	64%	27%	2%
Wallace River (070217)	24,667	23,219	31%	36%	26%	8%
Warnick (010229)	25,436	24,817	70%	2%	29%	0%
West Shannon (040435)	14,333	13,458	18%	9%	67%	6%
Woods Creek (070223)	42,463	35,484	24%		73%	3%

Table E-7. Percent of Each Watershed in Each Ownership Class

Watershed Name (and number)	Total Acres	Forested Acres ^{1/}	Percentage of Watershed in Each Ownership Class			
			DNR	Federal	Private ^{2/}	Other ^{3/}
Youngs Creek (070219)	23,776	21,907	12%	2%	85%	0%
<i>Planning Unit Average</i>			25.6%	20.5%	51.0%	2.9%
Olympic Experimental State Forest						
Bogachiel (200412)	44,993	44,021	37%	18%	44%	1%
Cedar (200609)	12,310	12,238	37%	22%	41%	1%
Clallam River (190303)	22,235	21,407	50%	0%	49%	1%
East Dickey (200418)	26,657	26,635	45%		54%	1%
Goodman-Mosquito (200610)	33,529	33,427	37%	12%	51%	0%
Hoh Lowlands (200608)	30,244	28,838	26%	4%	67%	2%
Hoko (190302)	44,534	44,167	24%	1%	72%	2%
Kalaloch Ridge (210115)	11,472	11,410	56%	9%	35%	0%
Lower Clearwater (210114)	45,246	44,771	45%	4%	48%	2%
Matheney-Salmon (210211)	21,630	21,378	17%	31%	1%	51%
Middle Hoh (200607)	46,272	44,758	71%	3%	25%	1%
Ozette Lake (200120)	35,130	34,895	15%	39%	45%	1%
Pysht River (190204)	32,972	32,676	6%	14%	79%	0%
Queets Corridor North (210213)	39,496	37,320	29%	38%	8%	25%
Queets Corridor South (210212)	29,667	29,275	25%	75%		
Quillayute Bottom (200417)	23,180	21,898	28%	16%	47%	9%
Rain Forest (200505)	56,435	52,643	11%	89%	0%	0%
Sekiu Coastal (190301)	27,412	27,309	14%		80%	6%
Sol Duc Lowlands (200416)	22,368	21,077	19%	15%	64%	2%
Sol Duc Valley (200201)	47,220	44,780	30%	40%	26%	4%
Sol Duc Valley (200316)	16,585	14,408	25%	18%	55%	2%
Upper Clearwater (210116)	58,265	57,986	98%	1%	1%	0%
West Dickey (200419)	28,311	27,784	12%		86%	2%
<i>Planning Unit Average</i>			33.0%	19.5%	42.5%	5.0%
South Coast Planning Unit						
Bunker Creek (230218)	22,788	21,126	29%		71%	0%
Cedar Creek (230521)	32,505	29,481	80%		15%	5%
Copalis River (210407)	40,529	39,032	6%		75%	19%
Curtis (230112)	43,351	37,274	17%		81%	2%
Elk Creek (230117)	38,773	37,975	33%		63%	4%
Elk River (220625)	32,340	29,390	11%		61%	28%
Garrard Creek (230220)	49,056	41,682	40%		59%	1%
Joe-Moclips (210408)	50,805	50,028	7%	0%	43%	49%
Lincoln Creek (230219)	48,086	40,597	30%		69%	1%
Lower Naselle (240108)	36,688	34,540	16%	1%	83%	1%
Lower Skookumchuck (230404)	44,616	33,729	19%		81%	0%
Lower Willapa (240315)	32,329	23,097	5%		94%	0%
Mill Creek (240305)	15,699	15,508	67%		32%	0%
Mox Chehalis (220106)	23,315	18,778	22%		77%	1%
Naselle Headwaters (240107)	48,336	47,324	11%		89%	0%
Nemah (240212)	40,522	39,754	26%		72%	2%
North River Headwaters (240404)	34,532	33,558	10%		90%	0%
Palix (240213)	35,825	34,395	10%		87%	3%
Porter Creek (230522)	32,023	30,994	88%		11%	1%
Rock-Jones (230116)	22,917	20,045	31%		68%	2%
Scatter Creek (230403)	31,680	15,813	5%		91%	4%
South Fork Willapa (240314)	26,664	25,538	37%		60%	3%
Waddel Creek (230501)	28,982	25,600	68%		31%	1%

Table E-7. Percent of Each Watershed in Each Ownership Class

Watershed Name (and number)	Total Acres	Forested Acres ^{1/}	Percentage of Watershed in Each Ownership Class			
			DNR	Federal	Private ^{2/}	Other ^{3/}
Willapa Headwaters (240306)	62,581	58,273	30%		69%	1%
<i>Planning Unit Average</i>			29.1%	0.0%	65.5%	5.4%
South Puget Planning Unit						
Ashford (110104)	27,680	25,170	30%	24%	43%	3%
Busy Wild (110204)	56,966	55,477	27%		65%	8%
Catt (110108)	13,279	13,240	53%	46%	0%	0%
Cumberland (090202)	26,260	24,347	11%		80%	9%
East Creek (110113)	14,429	13,514	23%	23%	52%	3%
Hood (150201)	145,611	129,375	23%	4%	64%	8%
Howard Hansen (090103)	46,472	45,732	35%	1%	49%	15%
Mineral Creek (110110)	23,047	22,885	20%		74%	6%
North Fork Green (090104)	18,410	18,335	36%		50%	14%
North Fork Mineral (110112)	16,072	16,070	84%		14%	2%
Olympia (130202)	18,529	14,863	20%		74%	5%
Reese Creek (110106)	5,036	4,991	96%		4%	0%
Squaxin (140003)	1,066	1,040	22%		0%	78%
Summit Lake (140002)	29,140	26,337	31%		68%	1%
Tiger (080303)	40,881	32,948	25%		61%	14%
<i>Planning Unit Average</i>			35.8%	6.5%	46.6%	11.1%
Straits Planning Unit						
Bell Creek (180104)	5,969	2,185	6%		93%	2%
Big Quil (170108)	51,823	47,083	7%	83%	10%	0%
Chimakum (170203)	28,202	22,477	6%	8.5%	82%	4%
Dabob (170106)	16,871	16,660	28%		70%	2%
Discovery Bay (170202)	58,871	54,002	13%	17%	64%	6%
Dungeness Valley (180103)	43,200	27,406	13%	23%	62%	2%
Hamma Hamma (160203)	69,941	63,458	15%	74%	10%	0%
Lilliwaup (160204)	29,080	28,383	56%	10%	33%	1%
Little Quil (170107)	28,536	27,161	10%	35%	54%	0%
Ludlow (170104)	22,897	21,543	9%	0%	90%	1%
Lyre (190107)	11,021	10,813	56%	12%	30%	2%
Port Angeles (180211)	24,883	16,437	18%	12%	67%	2%
Salt (190108)	26,336	22,900	43%		53%	4%
Sequim Bay (170201)	26,752	24,339	31%	26%	40%	3%
Siebert McDonald (180202)	35,481	29,862	25%	17%	58%	1%
Sutherland-Aldwell (180310)	35,109	31,830	19%	50%	27%	5%
Thorndike (170105)	16,587	16,374	9%	4%	86%	2%
Twins (190206)	20,351	20,288	37%	45%	17%	1%
<i>Planning Unit Average</i>			22.3%	23.1%	52.5%	2.1%

1/ Includes areas identified by Interagency Vegetation Mapping Project data as "vegetation," "<70% veg," "<30% conifer," or "100% veg." Areas not classified as Forested include those identified as agricultural or urban areas, water and wetlands, and unvegetated or unclassifiable sites such as snow, barren ground, and topographic shadow.

2/ Includes privately owned industrial and non-industrial (i.e., small landowner) lands.

3/ Includes municipal, tribal, non-DNR State lands, and other lands.

Table E-8. Percent of the Riparian Area in Each Watershed in the Small Tree Stages ^{1/}

	Total	Riparian	Riparian	Percentage Breakdown by Ownership ^{4/}			
Watershed Name (and number)	Acres	Acres ^{2/}	Area ^{3/}	DNR	Federal	Private ^{5/}	Other ^{6/}
Columbia Planning Unit							
Green River (260515)	46,383	17,668	54%	2%	0%	50%	2%
North Fork Toutle (260514)	41,051	14,159	47%	15%	0%	30%	2%
Winston (260320)	28,321	8,943	46%	8%	0%	37%	1%
Cedar Creek (260428)	14,441	4,839	42%	2%	0%	39%	1%
Upper SF Toutle (260508)	40,031	16,140	39%	12%	3%	23%	1%
Upper Washougal (280205)	31,719	10,543	37%	26%	5%	6%	0%
Hamilton Creek (280106)	32,845	7,271	36%	10%	11%	9%	6%
Swift Creek (270304)	74,150	25,760	35%	2%	7%	25%	0%
Bremer (260331)	19,894	7,651	34%	5%	3%	26%	1%
Rock Creek Clark (270508)	35,440	8,523	33%	5%	8%	20%	0%
Middle Kalama (270114)	51,534	19,484	33%	1%	0%	32%	0%
Silverstar (280204)	32,719	7,476	32%	8%	2%	20%	1%
South Fork Toutle (260513)	42,623	15,345	30%	10%	0%	21%	0%
Salmon Creek (260421)	43,837	11,846	30%	3%	0%	27%	1%
Stillwater (260625)	28,905	11,799	29%	1%	0%	28%	0%
Rock Creek (290415)	41,733	13,043	29%	14%	5%	9%	0%
Wind River (290414)	30,669	6,909	27%	5%	20%	3%	0%
West Fork Grays River (250311)	10,347	5,644	27%	3%	0%	24%	0%
Delameter (260623)	37,243	13,983	27%	2%	0%	25%	0%
Cold Creek (270509)	21,281	4,405	27%	19%	1%	6%	0%
North Elochoman (250203)	23,518	10,534	26%	5%	0%	21%	0%
Grays Bay (250310)	56,613	25,821	26%	2%	0%	23%	0%
South Fork Grays River (250302)	16,774	7,517	26%	9%	0%	16%	0%
Skamokawa (250209)	51,687	22,368	23%	5%	0%	19%	0%
Lower Kalama (270113)	49,823	14,901	23%	1%	0%	22%	0%
Cougar (270317)	32,888	10,845	23%	10%	6%	6%	0%
Cedar Creek (270416)	36,416	9,339	21%	2%	0%	19%	1%
Mill Creek (260429)	26,163	6,561	21%	3%	0%	18%	0%
Lake Merwin (270415)	46,439	15,175	20%	9%	0%	11%	0%
Siouxon (270305)	39,066	10,192	19%	8%	11%	0%	0%
Little Washougal (280203)	30,269	7,142	17%	7%	0%	10%	0%
Main Elochoman (250208)	37,009	15,789	16%	4%	0%	12%	0%
Abernethy (250104)	40,071	13,465	16%	10%	0%	6%	1%
Olequa (260626)	35,017	7,915	14%	2%	0%	11%	0%
Harmony (260330)	22,546	5,136	12%	3%	0%	8%	1%
Woodland (270412)	37,827	13,843	10%	2%	0%	7%	0%
Lacamas (280202)	41,185	5,777	7%	1%	1%	5%	0%
Spirit Lake (260507)	52,151	26,647	5%	2%	2%	0%	0%
Planning Unit Average			27%	6%	2%	18%	1%
North Puget Planning Unit							
Skookum Creek (010309)	23,905	8,621	45%	16%	1%	28%	0%
Hutchinson Creek (010310)	13,975	4,754	39%	13%	0%	26%	0%
Warnick (010229)	25,436	8,208	38%	28%	0%	10%	0%
Porter Canyon (010327)	18,550	5,855	36%	10%	0%	22%	4%
Howard Creek (010308)	39,040	11,411	36%	7%	0%	28%	1%
Canyon Creek (010232)	36,807	6,131	35%	7%	4%	24%	0%
Clearwater Creek (010328)	14,330	3,163	31%	25%	3%	3%	0%
Kenney Creek (010230)	2,791	765	31%	1%	0%	30%	0%

Table E-8. Percent of the Riparian Area in Each Watershed in the Small Tree Stages ^{1/}

Watershed Name (and number)	Total Acres	Riparian Acres ^{2/}	Riparian Area ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Day Creek (030105)	22,203	6,183	30%	3%	1%	26%	0%
Upper NF Stilly (050202)	32,833	6,648	27%	4%	19%	5%	0%
Loretta (030104)	15,769	3,748	27%	5%	5%	18%	0%
Gilligan (030106)	18,879	5,182	27%	6%	0%	20%	1%
Vedder (010131)	21,272	2,920	27%	8%	0%	19%	0%
Alder (030103)	22,865	4,499	27%	22%	0%	4%	0%
Deming (010226)	27,527	6,199	25%	15%	0%	11%	0%
Hansen Creek (030102)	29,010	7,622	25%	6%	0%	18%	0%
Jackman (040529)	16,399	3,006	25%	1%	5%	18%	0%
Marmot Ridge (010306)	31,794	5,308	24%	8%	4%	11%	0%
Raging River (070408)	22,853	5,514	23%	6%	0%	16%	0%
Lower Pilchuck Creek (050313)	19,364	3,838	22%	2%	0%	20%	0%
Acme (010311)	23,518	6,190	21%	8%	0%	14%	0%
Deer Creek (050201)	41,881	11,971	21%	4%	8%	9%	0%
Lake Whatcom (010412)	35,957	8,891	20%	12%	0%	9%	0%
Sauk Prairie (040320)	14,137	3,672	20%	8%	3%	9%	0%
Lower MF Snoqualmie (070307)	28,375	9,071	20%	13%	5%	3%	0%
Jim Creek (050109)	30,690	6,580	20%	3%	3%	14%	0%
Tolt (070415)	63,357	18,242	20%	1%	2%	14%	4%
Samish River (030301)	57,397	10,240	20%	6%	0%	13%	0%
East Shannon (040436)	34,065	6,254	19%	6%	3%	9%	0%
Hilt (040322)	12,453	2,416	19%	1%	7%	10%	0%
South Snoqualmie (070306)	57,077	14,262	18%	3%	9%	4%	2%
North Fork Snoqualmie (070313)	66,707	19,488	18%	2%	4%	11%	1%
Grandy (040534)	18,856	4,076	18%	5%	0%	12%	0%
West Shannon (040435)	14,333	3,819	18%	5%	0%	13%	0%
Friday Creek (030313)	24,129	3,639	18%	3%	0%	14%	0%
Verlot (050107)	23,540	6,013	17%	1%	9%	6%	0%
Pilchuck Mtn (070226)	42,517	12,926	17%	12%	0%	5%	0%
Cherry (070420)	38,183	8,079	17%	4%	0%	12%	0%
Samish Bay (010414)	13,258	2,306	17%	4%	0%	10%	2%
Cavanaugh (050316)	29,722	7,839	16%	11%	0%	5%	0%
Tate (070409)	9,798	2,605	16%	1%	0%	15%	0%
Ebey Hill (050214)	19,812	5,191	16%	8%	0%	8%	0%
Nookachamps (030107)	47,730	11,001	15%	6%	0%	9%	0%
Youngs Creek (070219)	23,776	5,381	15%	2%	0%	13%	0%
Spada (070216)	44,197	13,855	15%	10%	2%	0%	2%
Stimson Hill (050215)	18,833	5,632	14%	7%	0%	8%	0%
Rinker (040321)	20,481	6,277	14%	5%	1%	8%	0%
Jordan-Boulder (040224)	32,726	6,733	14%	2%	1%	11%	0%
Olney Creek (070225)	20,655	5,528	14%	5%	0%	9%	0%
Woods Creek (070223)	42,463	9,893	14%	5%	0%	9%	1%
Wallace River (070217)	24,667	6,382	14%	5%	4%	3%	1%
Hazel (050203)	24,179	6,144	13%	7%	3%	3%	0%
Silverton (050106)	46,399	12,922	12%	1%	10%	1%	0%
Cypress (030415)	4,950	675	11%	9%	0%	1%	0%
Tenas (040319)	36,688	8,833	11%	2%	6%	3%	0%
Corkindale (040531)	24,194	5,339	11%	1%	6%	4%	0%
Sumas River (010125)	36,444	4,972	10%	3%	0%	7%	0%

Table E-8. Percent of the Riparian Area in Each Watershed in the Small Tree Stages ^{1/}

Watershed Name (and number)	Total Acres	Riparian Acres ^{2/}	Riparian Area ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Lummi Island (010617)	5,063	504	10%	0%	0%	8%	2%
Jordan (050108)	21,252	5,609	10%	0%	0%	10%	0%
French Boulder (050204)	45,327	9,837	10%	2%	6%	1%	0%
Sultan River (070224)	24,388	6,980	9%	5%	2%	2%	1%
<i>Planning Unit Average</i>			20%	6%	2%	11%	0%
Olympic Experimental State Forest							
Kalaloch Ridge (210115)	11,472	4,739	40%	23%	1%	16%	0%
Hoko (190302)	44,534	13,700	39%	8%	0%	31%	1%
Lower Clearwater (210114)	45,246	17,727	37%	16%	0%	19%	1%
West Dickey (200419)	28,311	8,407	34%	4%	0%	30%	0%
Cedar (200609)	12,310	3,683	34%	15%	2%	16%	0%
Goodman-Mosquito (200610)	33,529	11,858	34%	9%	0%	25%	0%
East Dickey (200418)	26,657	7,274	32%	14%	0%	18%	0%
Hoh Lowlands (200608)	30,244	10,976	32%	8%	0%	23%	1%
Sekiu Coastal (190301)	27,412	9,872	31%	3%	0%	26%	2%
Pysht River (190204)	32,972	8,682	30%	3%	7%	19%	0%
Matheney-Salmon (210211)	21,630	5,577	30%	3%	9%	0%	17%
Sol Duc Valley (200201)	47,220	13,008	29%	9%	13%	6%	0%
Upper Clearwater (210116)	58,265	19,964	28%	28%	0%	0%	0%
Middle Hoh (200607)	46,272	18,410	26%	18%	0%	7%	0%
Clallam River (190303)	22,235	5,625	26%	16%	0%	9%	0%
Sol Duc Valley (200316)	16,585	5,329	23%	11%	2%	10%	0%
Bogachiel (200412)	44,993	14,984	22%	9%	1%	11%	0%
Queets Corridor South (210212)	29,667	6,439	21%	5%	17%	0%	0%
Queets Corridor North (210213)	39,496	9,905	20%	6%	5%	3%	5%
Sol Duc Lowlands (200416)	22,368	6,545	20%	4%	5%	11%	0%
Quillayute Bottom (200417)	23,180	7,176	19%	6%	1%	11%	1%
Ozette Lake (200120)	35,130	10,132	19%	4%	1%	14%	0%
Rain Forest (200505)	56,435	12,578	8%	4%	4%	0%	0%
<i>Planning Unit Average</i>			28%	10%	3%	13%	1%
South Coast Planning Unit							
Elk River (220625)	32,340	12,792	51%	8%	0%	27%	17%
Palix (240213)	35,825	15,918	49%	5%	0%	43%	2%
Nemah (240212)	40,522	19,123	42%	8%	0%	34%	0%
Elk Creek (230117)	38,773	16,767	39%	11%	0%	27%	1%
South Fork Willapa (240314)	26,664	12,941	38%	13%	0%	23%	1%
Rock-Jones (230116)	22,917	9,502	34%	12%	0%	22%	0%
Lower Naselle (240108)	36,688	18,388	33%	5%	0%	27%	0%
Willapa Headwaters (240306)	62,581	28,873	33%	12%	0%	20%	0%
Mill Creek (240305)	15,699	7,283	33%	22%	0%	11%	0%
Porter Creek (230522)	32,023	7,373	31%	27%	0%	4%	0%
Bunker Creek (230218)	22,788	8,564	29%	9%	0%	20%	0%
North River Headwaters (240402)	34,532	12,663	29%	3%	0%	25%	0%
Naselle Headwaters (240107)	48,336	24,664	29%	3%	0%	26%	0%
Lincoln Creek (230219)	48,086	15,260	28%	11%	0%	17%	0%
Lower Willapa (240315)	32,329	17,220	27%	2%	0%	25%	0%
Mox Chehalis (220106)	23,315	6,228	26%	6%	0%	19%	0%
Curtis (230112)	43,351	18,356	26%	7%	0%	19%	0%
Garrard Creek (230220)	49,056	16,414	25%	11%	0%	13%	0%

Table E-8. Percent of the Riparian Area in Each Watershed in the Small Tree Stages ^{1/}

Watershed Name (and number)	Total Acres	Riparian Acres ^{2/}	Riparian Area ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Copalis River (210407)	40,529	10,699	24%	2%	0%	15%	7%
Waddel Creek (230501)	28,982	6,550	22%	18%	0%	4%	0%
Cedar Creek (230521)	32,505	7,724	22%	19%	0%	2%	0%
Joe-Moclips (210408)	50,805	12,496	21%	2%	0%	11%	8%
Lower Skookumchuck (230404)	44,616	15,981	17%	5%	0%	12%	0%
Scatter Creek (230403)	31,680	6,533	16%	3%	0%	13%	0%
<i>Planning Unit Average</i>			30%	9%	0%	19%	2%
South Puget Planning Unit							
North Fork Mineral (110112)	16,072	5,707	60%	53%	0%	7%	1%
Mineral Creek (110110)	23,047	8,281	53%	10%	0%	41%	2%
Catt (110108)	13,279	4,649	49%	31%	18%	0%	0%
Reese Creek (110106)	5,036	1,248	49%	49%	0%	0%	0%
Busy Wild (110204)	56,966	17,975	48%	11%	0%	37%	1%
East Creek (110113)	14,429	5,171	38%	10%	12%	15%	1%
North Fork Green (090104)	18,410	5,005	38%	10%	0%	25%	3%
Howard Hansen (090103)	46,472	14,423	34%	14%	0%	14%	6%
Cumberland (090202)	26,260	4,411	29%	6%	0%	22%	1%
Ashford (110104)	27,680	9,164	28%	9%	6%	11%	1%
Summit Lake (140002)	29,140	5,095	25%	9%	0%	16%	0%
Squaxin (140003)	1,066	185	25%	7%	0%	0%	19%
Tiger (080303)	40,881	6,899	20%	7%	0%	11%	2%
Hood (150201)	145,611	29,448	19%	4%	0%	14%	2%
Olympia (130202)	18,529	2,751	17%	4%	0%	12%	0%
<i>Planning Unit Average</i>			36%	16%	2%	15%	3%
Straits Planning Unit							
Dabob (170106)	16,871	3,678	39%	13%	0%	25%	1%
Ludlow (170104)	22,897	4,737	36%	3%	0%	33%	0%
Lyre (190107)	11,021	2,128	36%	24%	3%	8%	1%
Thorndike (170105)	16,587	3,738	34%	4%	2%	27%	1%
Twins (190206)	20,351	4,302	34%	15%	14%	5%	0%
Chimakum (170203)	28,202	4,547	29%	2%	1%	26%	1%
Discovery Bay (170202)	58,871	7,162	29%	6%	6%	16%	1%
Sequim Bay (170201)	26,752	4,192	29%	12%	6%	11%	1%
Siebert McDonald (180202)	35,481	5,179	26%	8%	7%	11%	0%
Salt (190108)	26,336	3,854	25%	10%	0%	13%	1%
Lilliwaup (160204)	29,080	6,242	23%	16%	2%	6%	0%
Little Quil (170107)	28,536	4,660	23%	3%	7%	13%	0%
Port Angeles (180211)	24,883	3,332	21%	7%	2%	12%	1%
Big Quil (170108)	51,823	6,674	19%	3%	12%	4%	0%
Hamma Hamma (160203)	69,941	9,272	18%	6%	8%	3%	0%
Sutherland-Aldwell (180310)	35,109	5,667	17%	5%	5%	5%	1%
Dungeness Valley (180103)	43,200	8,670	12%	3%	4%	5%	0%
Bell Creek (180104)	5,969	849	8%	1%	0%	8%	0%
<i>Planning Unit Average</i>			26%	8%	4%	13%	1%

Table E-8. Percent of the Riparian Area in Each Watershed in the Small Tree Stages^{1/}

Watershed Name (and number)	Total Acres	Riparian Acres^{2/}	Riparian Area^{3/}	Percentage Breakdown by Ownership^{4/}			
				DNR	Federal	Private^{5/}	Other^{6/}

1/ Interagency Vegetation Mapping Project data do not identify Stand Development Stages; for this analysis, stands identified as having a Quadratic Mean Diameter less than 10 inches are considered small trees. Values of "0%" indicate amounts representing less than 0.5 percent of the riparian area.

2/ Includes areas identified by Interagency Vegetation Mapping Project data as "vegetation," "<70% veg," "<30% conifer," or "100% veg." Stands in the latter three classes could not be assigned size classes, and therefore were not grouped into Stand Development Stages. Approximately 70% of forested areas were identified as "vegetation" and grouped into Stand Development Stages. Riparian widths were assumed to be 155 feet on each side of Type 1, 2, and 3 streams and 100 feet on each side of Type 4 streams using the upgraded stream typing described in Appendix A.

3/ Equals acres of small tree forest divided by total riparian acres in the watershed.

4/ Equals the amount of small tree forest on each ownership class, divided by total riparian acres in the watershed.

5/ Includes privately owned industrial and non-industrial (i.e., small landowner) lands.

6/ Includes municipal, tribal, non-DNR State lands, and other lands.

Table E-9. Anadromous Stream Density and Length in Each Watershed

Watershed Name (and Number)	Anadromous			Miles Breakdown by Ownership			
	Total Acres	Stream Density mi/sq mi	Total Anadromous Stream Miles				
				DNR	Federal	Private ^{1/}	Other ^{2/}
Columbia Planning Unit							
Wind River (290414)	30,669	0.59	28.5	0.4	18.7	8.8	0.6
Grays Bay (250310)	56,613	0.57	50.0	0.0	0.0	38.6	11.5
Cedar Creek (270416)	36,416	0.56	31.8	1.0	0.3	29.5	1.1
North Fork Toutle (260514)	41,051	0.55	35.2	0.9	0.0	21.2	13.0
Hamilton Creek (280106)	32,845	0.51	26.2	0.0	5.6	8.0	12.6
Skamokawa (250209)	51,687	0.51	41.1	6.1	0.7	26.1	8.2
Cold Creek (270509)	21,281	0.49	16.5	10.9	0.0	5.5	0.1
Little Washougal (280203)	30,269	0.48	22.9	0.2	0.2	21.1	1.4
South Fork Grays River (250302)	16,774	0.48	12.5	6.7	0.0	5.7	0.0
Upper Washougal (280205)	31,719	0.45	22.5	17.4	0.0	4.7	0.4
Olequa (260626)	35,017	0.45	24.6	0.0	0.0	24.6	0.0
Delameter (260623)	37,243	0.44	25.9	0.0	0.0	25.9	0.0
Woodland (270412)	37,827	0.44	26.2	0.0	0.0	24.0	2.2
Salmon Creek (260421)	43,837	0.44	30.3	0.0	0.0	26.7	3.6
Silverstar (280204)	32,719	0.43	21.9	1.4	1.5	17.7	1.3
West Fork Grays River (250311)	10,347	0.43	6.9	1.4	0.0	5.4	0.2
South Fork Toutle (260513)	42,623	0.42	27.8	4.3	0.0	23.4	0.2
Main Elochoman (250208)	37,009	0.42	24.1	1.9	0.6	14.0	7.6
Abernethy (250104)	40,071	0.40	25.2	8.2	0.4	12.5	4.1
Green River (260515)	46,383	0.38	27.6	0.0	0.0	24.7	2.9
North Elochoman (250203)	23,518	0.37	13.5	3.7	0.0	9.6	0.1
Stillwater (260625)	28,905	0.36	16.3	0.0	0.0	16.3	0.0
Rock Creek Clark (270508)	35,440	0.33	18.2	1.8	2.0	12.2	2.1
Cedar Creek (260428)	14,441	0.33	7.3	0.0	0.0	6.8	0.6
Middle Kalama (270114)	51,534	0.32	26.2	0.9	0.0	25.2	0.0
Lower Kalama (270113)	49,823	0.32	24.9	0.0	0.0	21.0	3.9
Upper SF Toutle (260508)	40,031	0.30	19.0	5.9	0.0	9.7	3.4
Mill Creek (260429)	26,163	0.24	9.7	0.0	0.0	9.7	0.1
Rock Creek (290415)	41,733	0.14	9.4	0.0	0.0	3.8	5.6
Spirit Lake (260507)	52,151	0.11	9.2	0.1	9.2	0.0	0.0
Lacamas (280202)	41,185	0.07	4.2	0.0	0.0	0.9	3.3
Lake Merwin (270415)	46,439	0.00	0.2	0.0	0.0	0.2	0.0
Harmony (260330)	22,546	0.00	0.0	0.0	0.0	0.0	0.0
Winston (260320)	28,321	0.00	0.0	0.0	0.0	0.0	0.0
Bremer (260331)	19,894	0.00	0.0	0.0	0.0	0.0	0.0
Swift Creek (270304)	74,150	0.00	0.0	0.0	0.0	0.0	0.0
Siouxon (270305)	39,066	0.00	0.0	0.0	0.0	0.0	0.0
Cougar (270317)	32,888	0.00	0.0	0.0	0.0	0.0	0.0
Planning Unit Average		0.32	18.1	1.9	1.0	12.7	2.4
North Puget Planning Unit							
Sumas River (010125)	36,444	1.05	59.5	0.0	0.0	59.0	0.5
Gilligan (030106)	18,879	0.84	24.9	1.9	0.0	19.3	3.7
Jordan (050108)	21,252	0.80	26.4	0.0	0.0	26.3	0.2
Rinker (040321)	20,481	0.72	22.9	4.9	0.6	16.1	1.4
Kenney Creek (010230)	2,791	0.71	3.1	0.0	0.0	3.1	0.0
Acme (010311)	23,518	0.70	25.9	0.0	0.0	25.6	0.3

Table E-9. Anadromous Stream Density and Length in Each Watershed

Watershed Name (and Number)	Anadromous			Miles Breakdown by Ownership			
	Total Acres	Stream Density mi/sq mi	Total Anadromous Stream Miles				
				DNR	Federal	Private ^{1/}	Other ^{2/}
Lower Pilchuck Creek (050313)	19,364	0.69	20.9	1.0	0.0	19.4	0.6
Nookachamps (030107)	47,730	0.69	51.2	4.1	0.0	46.7	0.5
Samish River (030301)	57,397	0.64	57.0	1.9	0.0	54.1	1.0
Friday Creek (030313)	24,129	0.63	23.7	0.3	0.0	22.2	1.1
Hansen Creek (030102)	29,010	0.61	27.8	0.5	0.0	23.3	4.0
Hutchinson Creek (010310)	13,975	0.60	13.1	3.6	0.0	9.5	0.0
Stimson Hill (050215)	18,833	0.59	17.3	1.2	0.0	15.4	0.7
Hazel (050203)	24,179	0.58	22.0	2.4	4.2	15.3	0.1
Woods Creek (070223)	42,463	0.58	38.6	3.0	0.0	35.6	0.0
Alder (030103)	22,865	0.58	20.7	6.3	0.0	14.4	0.1
Warnick (010229)	25,436	0.57	22.6	4.9	0.9	16.8	0.0
Raging River (070408)	22,853	0.56	20.0	4.0	0.0	16.0	0.1
Sauk Prairie (040320)	14,137	0.54	12.0	1.5	0.3	8.2	1.9
Porter Canyon (010327)	18,550	0.54	15.7	3.3	0.0	11.0	1.3
Deming (010226)	27,527	0.54	23.0	0.6	0.0	22.3	0.1
Ebey Hill (050214)	19,812	0.53	16.3	0.7	0.0	14.9	0.7
Loretta (030104)	15,769	0.48	11.9	0.2	0.0	11.6	0.0
Jim Creek (050109)	30,690	0.47	22.7	2.6	4.3	15.8	0.0
Verlot (050107)	23,540	0.44	16.1	0.8	6.3	9.0	0.0
Olney Creek (070225)	20,655	0.43	14.0	0.9	0.0	13.2	0.0
French Boulder (050204)	45,327	0.42	29.7	11.9	4.7	12.7	0.5
Pilchuck Mtn (070226)	42,517	0.42	27.7	12.7	0.0	14.9	0.1
Grandy (040534)	18,856	0.42	12.2	0.6	0.0	11.0	0.6
Silverton (050106)	46,399	0.41	29.7	0.0	26.8	2.2	0.8
Deer Creek (050201)	41,881	0.41	26.6	7.9	7.0	11.6	0.1
Samish Bay (010414)	13,258	0.40	8.3	0.0	0.0	8.3	0.0
Youngs Creek (070219)	23,776	0.39	14.3	0.2	0.0	14.1	0.0
Cherry (070420)	38,183	0.38	22.6	4.1	0.0	16.0	2.6
Sultan River (070224)	24,388	0.36	13.9	3.0	0.0	8.9	2.0
Howard Creek (010308)	39,040	0.36	21.9	1.7	1.0	15.0	4.2
Wallace River (070217)	24,667	0.34	13.2	0.4	0.0	10.5	2.2
Corkindale (040531)	24,194	0.31	11.8	0.0	0.8	8.9	2.1
Jordan-Boulder (040224)	32,726	0.31	15.9	1.8	2.6	11.2	0.4
Hilt (040322)	12,453	0.28	5.5	0.2	0.0	5.1	0.2
Tolt (070415)	63,357	0.28	27.9	1.7	0.0	24.5	1.7
Tate (070409)	9,798	0.22	3.4	0.0	0.0	3.1	0.3
Tenas (040319)	36,688	0.21	11.8	3.1	2.7	4.7	1.3
Vedder (010131)	21,272	0.20	6.8	0.0	0.0	6.8	0.0
Skookum Creek (010309)	23,905	0.20	7.3	3.2	0.0	4.1	0.0
Canyon Creek (010232)	36,807	0.17	10.0	1.1	1.5	7.4	0.0
East Shannon (040436)	34,065	0.16	8.3	0.0	4.2	0.7	3.4
Day Creek (030105)	22,203	0.15	5.2	0.0	0.0	5.2	0.0
West Shannon (040435)	14,333	0.14	3.2	0.0	0.0	0.1	3.1
Upper NF Stilly (050202)	32,833	0.09	4.4	2.4	0.0	2.0	0.0
Jackman (040529)	16,399	0.07	1.8	0.0	0.0	1.8	0.0
Lummi Island (010617)	5,063	0.00	0.0	0.0	0.0	0.0	0.0
Cypress (030415)	4,950	0.00	0.0	0.0	0.0	0.0	0.0

Table E-9. Anadromous Stream Density and Length in Each Watershed

Watershed Name (and Number)	Total Acres	Anadromous Stream Density mi/sq mi	Total Anadromous Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Lake Whatcom (010412)	35,957	0.00	0.0	0.0	0.0	0.0	0.0
Cavanaugh (050316)	29,722	0.00	0.0	0.0	0.0	0.0	0.0
Clearwater Creek (010328)	14,330	0.00	0.0	0.0	0.0	0.0	0.0
Marmot Ridge (010306)	31,794	0.00	0.0	0.0	0.0	0.0	0.0
Lower MF Snoqualmie (070307)	28,375	0.00	0.0	0.0	0.0	0.0	0.0
South Snoqualmie (070306)	57,077	0.00	0.0	0.0	0.0	0.0	0.0
North Fork Snoqualmie (070313)	66,707	0.00	0.0	0.0	0.0	0.0	0.0
Spada (070216)	44,197	0.00	0.0	0.0	0.0	0.0	0.0
<i>Planning Unit Average</i>		<i>0.38</i>	<i>15.9</i>	<i>1.7</i>	<i>1.1</i>	<i>12.4</i>	<i>0.7</i>
Olympic Experimental State Forest							
West Dickey (200419)	28,311	1.09	48.3	6.5	0.0	39.1	2.6
Sol Duc Valley (200316)	16,585	1.09	28.2	5.2	3.4	19.4	0.2
Sol Duc Lowlands (200416)	22,368	1.02	35.8	3.0	1.8	29.8	1.1
East Dickey (200418)	26,657	0.88	36.7	12.9	0.0	23.4	0.4
Bogachiel (200412)	44,993	0.85	59.7	17.7	9.5	30.4	2.0
Pysht River (190204)	32,972	0.81	41.7	0.1	2.0	39.2	0.4
Sol Duc Valley (200201)	47,220	0.77	56.8	16.2	13.2	20.1	7.3
Lower Clearwater (210114)	45,246	0.76	53.7	17.4	0.1	34.0	2.1
Hoh Lowlands (200608)	30,244	0.76	35.9	7.1	0.3	27.8	0.7
Hoko (190302)	44,534	0.75	52.3	6.8	0.0	41.3	4.2
Clallam River (190303)	22,235	0.75	26.0	10.7	0.0	14.8	0.6
Quillayute Bottom (200417)	23,180	0.73	26.3	4.5	2.8	18.1	0.9
Cedar (200609)	12,310	0.69	13.2	2.9	2.8	7.5	0.1
Queets Corridor North (210213)	39,496	0.63	38.8	4.4	21.8	1.9	10.7
Middle Hoh (200607)	46,272	0.61	44.4	17.0	2.0	22.7	2.7
Goodman-Mosquito (200610)	33,529	0.58	30.6	13.9	4.0	12.6	0.1
Matheney-Salmon (210211)	21,630	0.56	18.9	1.8	5.1	0.4	11.6
Sekiu Coastal (190301)	27,412	0.53	22.6	1.6	0.0	21.0	0.0
Rain Forest (200505)	56,435	0.48	42.1	2.1	36.6	0.3	3.2
Queets Corridor South (210212)	29,667	0.46	21.1	5.7	15.4	0.0	0.0
Upper Clearwater (210116)	58,265	0.45	41.3	41.0	0.0	0.3	0.0
Ozette Lake (200120)	35,130	0.43	23.3	1.5	1.0	8.7	12.1
Kalaloch Ridge (210115)	11,472	0.35	6.2	0.8	1.1	4.2	0.1
<i>Planning Unit Average</i>		<i>0.70</i>	<i>35.0</i>	<i>8.7</i>	<i>5.3</i>	<i>18.1</i>	<i>2.7</i>
South Coast Planning Unit							
Nemah (240212)	40,522	0.68	42.7	12.2	0.0	29.7	0.8
Lincoln Creek (230219)	48,086	0.67	50.3	4.5	0.0	44.3	1.5
Garrard Creek (230220)	49,056	0.63	48.1	7.1	0.0	36.7	4.4
Mox Chehalis (220106)	23,315	0.63	22.8	0.9	0.0	21.9	0.0
Naselle Headwaters (240107)	48,336	0.60	45.5	1.1	0.0	44.2	0.2
South Fork Willapa (240314)	26,664	0.59	24.7	7.7	0.0	15.6	1.4
Lower Skookumchuck (230404)	44,616	0.56	39.4	0.8	0.0	37.9	0.7
Elk Creek (230117)	38,773	0.55	33.5	7.1	0.0	25.7	0.7
Cedar Creek (230521)	32,505	0.52	26.4	15.7	0.0	6.3	4.4
North River Headwaters (240402)	34,532	0.52	27.8	0.0	0.0	27.8	0.0
Willapa Headwaters (240306)	62,581	0.49	48.3	3.9	0.0	44.1	0.3
Lower Naselle (240108)	36,688	0.48	27.2	0.0	0.0	26.8	0.4

Table E-9. Anadromous Stream Density and Length in Each Watershed

Watershed Name (and Number)	Anadromous			Miles Breakdown by Ownership			
	Total Acres	Stream Density mi/sq mi	Total Anadromous Stream Miles				
				DNR	Federal	Private ^{1/}	Other ^{2/}
Waddel Creek (230501)	28,982	0.46	21.0	8.5	0.0	12.0	0.4
Mill Creek (240305)	15,699	0.46	11.2	4.8	0.0	6.3	0.1
Curtis (230112)	43,351	0.43	29.3	2.6	0.0	25.6	1.2
Porter Creek (230522)	32,023	0.37	18.6	10.5	0.0	7.5	0.7
Lower Willapa (240315)	32,329	0.37	18.5	0.1	0.0	18.4	0.1
Rock-Jones (230116)	22,917	0.37	13.1	0.6	0.0	12.5	0.1
Scatter Creek (230403)	31,680	0.33	16.4	0.0	0.0	15.3	1.0
Elk River (220625)	32,340	0.30	15.1	3.0	0.0	4.6	7.5
Joe-Moclips (210408)	50,805	0.28	22.4	0.4	0.0	6.0	16.0
Copalis River (210407)	40,529	0.25	15.9	0.3	0.0	12.3	3.4
Bunker Creek (230218)	22,788	0.17	6.0	0.4	0.0	5.5	0.0
Palix (240213)	35,825	0.14	7.7	0.0	0.0	7.1	0.6
<i>Planning Unit Average</i>		<i>0.45</i>	<i>26.3</i>	<i>3.8</i>	<i>0.0</i>	<i>20.6</i>	<i>1.9</i>
South Puget Planning Unit							
Tiger (080303)	40,881	0.67	42.7	4.4	0.0	34.6	3.7
Hood (150201)	145,611	0.63	143.3	35.9	0.9	100.3	6.1
Olympia (130202)	18,529	0.41	12.0	1.2	0.0	10.8	0.0
Howard Hansen (090103)	46,472	0.41	30.1	2.8	0.0	4.1	23.2
North Fork Green (090104)	18,410	0.37	10.8	0.9	0.0	8.0	1.8
Busy Wild (110204)	56,966	0.33	29.0	5.0	0.0	19.6	4.4
Summit Lake (140002)	29,140	0.24	10.9	1.0	0.0	9.9	0.0
Cumberland (090202)	26,260	0.21	8.5	0.0	0.0	1.6	6.9
Squaxin (140003)	1,066	0.00	0.0	0.0	0.0	0.0	0.0
Reese Creek (110106)	5,036	0.00	0.0	0.0	0.0	0.0	0.0
North Fork Mineral (110112)	16,072	0.00	0.0	0.0	0.0	0.0	0.0
Mineral Creek (110110)	23,047	0.00	0.0	0.0	0.0	0.0	0.0
Ashford (110104)	27,680	0.00	0.0	0.0	0.0	0.0	0.0
East Creek (110113)	14,429	0.00	0.0	0.0	0.0	0.0	0.0
Catt (110108)	13,279	0.00	0.0	0.0	0.0	0.0	0.0
<i>Planning Unit Average</i>		<i>0.22</i>	<i>19.2</i>	<i>3.4</i>	<i>0.1</i>	<i>12.6</i>	<i>3.1</i>
Straits Planning Unit							
Siebert McDonald (180202)	35,481	0.50	28.0	7.9	0.5	18.7	0.9
Chimakum (170203)	28,202	0.50	22.0	1.0	0.0	21.0	0.0
Salt (190108)	26,336	0.49	20.3	3.1	0.0	15.2	2.0
Port Angeles (180211)	24,883	0.48	18.6	1.1	0.2	16.8	0.5
Dungeness Valley (180103)	43,200	0.46	30.9	3.2	2.4	24.7	0.7
Bell Creek (180104)	5,969	0.41	3.8	0.0	0.0	3.8	0.0
Twins (190206)	20,351	0.39	12.4	6.2	1.4	4.4	0.5
Little Quil (170107)	28,536	0.36	16.1	0.7	0.9	14.4	0.0
Lyre (190107)	11,021	0.33	5.6	3.1	0.0	2.1	0.4
Dabob (170106)	16,871	0.32	8.5	1.4	0.0	6.5	0.7
Thorndike (170105)	16,587	0.31	8.1	0.9	0.0	7.2	0.0
Discovery Bay (170202)	58,871	0.28	25.8	2.5	1.1	22.1	0.1
Sequim Bay (170201)	26,752	0.27	11.1	2.8	0.6	7.5	0.1
Sutherland-Aldwell (180310)	35,109	0.18	9.6	0.0	0.6	7.1	2.0
Ludlow (170104)	22,897	0.17	6.1	0.0	0.0	6.1	0.0
Big Quil (170108)	51,823	0.17	13.7	1.0	6.9	5.7	0.1

Table E-9. Anadromous Stream Density and Length in Each Watershed

Watershed Name (and Number)	Total Acres	Anadromous Stream Density mi/sq mi	Total Anadromous Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Lilliwaup (160204)	29,080	0.16	7.2	2.1	0.0	5.0	0.0
Hamma Hamma (160203)	69,941	0.05	5.8	0.0	0.0	5.8	0.0
<i>Planning Unit Average</i>		<i>0.32</i>	<i>14.1</i>	<i>2.1</i>	<i>0.8</i>	<i>10.8</i>	<i>0.4</i>

1/ Includes privately owned industrial and non-industrial (i.e., small landowner) lands.

2/ Includes municipal, tribal, non-DNR State lands, and other lands.

Table E-10. Overall Stream Density and Length in Each Watershed

Watershed Name (and Number)	Total Acres	Stream Density mi/sq mi	Total Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Columbia Planning Unit							
West Fork Grays River (250311)	10,347	12.92	208.9	36.0	0.0	172.2	0.7
Spirit Lake (260507)	52,151	12.05	981.9	77.9	868.4	27.5	8.2
North Elochoman (250203)	23,518	10.66	391.6	67.5	0.0	323.3	0.8
Grays Bay (250310)	56,613	10.41	921.2	84.2	0.0	751.4	85.5
South Fork Grays River (250302)	16,774	10.36	271.5	72.1	0.0	197.9	1.5
Skamokawa (250209)	51,687	9.94	802.5	177.9	22.9	544.2	57.5
Stillwater (260625)	28,905	9.48	428.0	24.6	0.0	402.9	0.5
Upper SF Toutle (260508)	40,031	9.38	586.9	201.0	130.5	242.9	12.6
Main Elochoman (250208)	37,009	9.30	538.0	108.2	19.7	348.3	61.7
Bremer (260331)	19,894	8.67	269.6	36.5	24.1	196.6	12.3
Middle Kalama (270114)	51,534	8.64	696.0	49.4	0.0	642.9	3.7
Delameter (260623)	37,243	8.49	493.8	22.6	0.0	470.9	0.4
Green River (260515)	46,383	8.44	611.5	26.9	0.0	554.8	29.8
Swift Creek (270304)	74,150	7.96	922.3	93.0	317.4	503.3	8.6
South Fork Toutle (260513)	42,623	7.88	524.5	131.9	0.0	387.6	5.0
Woodland (270412)	37,827	7.71	455.7	72.0	1.2	354.7	27.7
North Fork Toutle (260514)	41,051	7.71	494.4	126.4	0.0	312.1	55.9
Abernethy (250104)	40,071	7.70	482.3	300.4	1.1	147.7	33.1
Upper Washougal (280205)	31,719	7.69	381.0	272.4	45.2	59.4	4.0
Cedar Creek (260428)	14,441	7.52	169.7	9.1	0.0	153.4	7.2
Cougar (270317)	32,888	7.50	385.6	149.4	125.4	108.7	2.0
Rock Creek (290415)	41,733	7.14	465.3	213.8	77.5	147.0	26.9
Lake Merwin (270415)	46,439	7.05	511.5	213.4	0.4	296.6	1.1
Winston (260320)	28,321	7.05	311.9	74.5	0.0	227.3	10.2
Lower Kalama (270113)	49,823	6.50	506.0	27.5	0.0	444.5	34.1
Siouxon (270305)	39,066	6.21	379.1	161.8	212.6	4.4	0.3
Salmon Creek (260421)	43,837	5.92	405.2	38.2	0.0	355.1	11.9
Cedar Creek (270416)	36,416	5.50	312.8	29.0	1.5	274.6	7.6
Mill Creek (260429)	26,163	5.43	222.2	23.6	0.0	197.5	1.0
Wind River (290414)	30,669	5.28	253.2	37.9	165.3	43.5	6.5
Rock Creek Clark (270508)	35,440	5.27	291.8	42.4	68.3	174.9	6.3
Olequa (260626)	35,017	5.15	281.6	38.2	0.0	241.9	1.5
Silverstar (280204)	32,719	4.88	249.7	61.3	34.3	145.4	8.6
Harmony (260330)	22,546	4.81	169.4	9.7	0.0	150.7	9.0
Little Washougal (280203)	30,269	4.70	222.4	47.2	0.7	159.2	15.3
Hamilton Creek (280106)	32,845	4.57	234.5	47.6	64.8	67.7	54.5
Cold Creek (270509)	21,281	4.45	148.1	109.1	6.1	31.7	1.3
Lacamas (280202)	41,185	2.84	183.0	17.9	17.9	124.4	22.8
Planning Unit Average		7.45	425.4	87.7	58.0	262.9	16.8
North Puget Planning Unit							
Skookum Creek (010309)	23,905	8.04	300.4	81.0	27.1	191.6	0.7
Spada (070216)	44,197	7.20	497.2	290.2	126.5	11.0	69.5
Lower MF Snoqualmie (070307)	28,375	6.88	304.9	159.9	78.7	62.1	4.2
Hutchinson Creek (010310)	13,975	6.81	148.8	52.4	0.0	96.1	0.2
Warnick (010229)	25,436	6.76	268.6	165.4	4.1	98.8	0.3
Porter Canyon (010327)	18,550	6.52	188.9	56.5	0.0	107.1	25.2
Silverton (050106)	46,399	6.40	464.2	36.9	412.8	11.4	3.1
North Fork Snoqualmie (070313)	66,707	6.34	661.2	56.8	268.9	307.9	27.6
Pilchuck Mtn (070226)	42,517	6.23	414.0	289.4	1.1	113.2	10.3

Table E-10. Overall Stream Density and Length in Each Watershed

Watershed Name (and Number)	Total Acres	Stream Density mi/sq mi	Total Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Day Creek (030105)	22,203	6.17	214.2	15.3	19.3	179.4	0.2
Rinker (040321)	20,481	6.12	195.9	69.9	21.7	96.8	7.4
Deer Creek (050201)	41,881	6.11	399.9	78.1	193.0	128.3	0.5
Howard Creek (010308)	39,040	6.08	370.7	62.6	19.5	262.4	26.2
Stimson Hill (050215)	18,833	6.04	177.6	89.5	0.0	86.5	1.5
West Shannon (040435)	14,333	5.91	132.3	24.9	7.1	85.5	14.8
Tolt (070415)	63,357	5.79	572.9	35.7	57.7	384.3	95.1
Sultan River (070224)	24,388	5.79	220.5	118.4	25.9	47.2	29.0
Wallace River (070217)	24,667	5.52	212.7	41.4	106.5	46.2	18.6
Cavanaugh (050316)	29,722	5.47	254.1	149.3	0.0	104.7	0.2
Kenney Creek (010230)	2,791	5.47	23.9	0.3	0.0	23.5	0.0
South Snoqualmie (070306)	57,077	5.43	484.6	60.2	268.9	105.0	50.6
Olney Creek (070225)	20,655	5.41	174.5	63.6	0.0	108.9	2.1
Gilligan (030106)	18,879	5.34	157.4	21.8	0.0	121.1	14.5
Sauk Prairie (040320)	14,137	5.31	117.3	35.8	16.7	58.9	5.9
Verlot (050107)	23,540	5.28	194.3	14.9	107.0	69.7	2.7
Hazel (050203)	24,179	5.25	198.4	75.1	64.9	58.0	0.5
Tenas (040319)	36,688	5.24	300.1	40.2	215.0	40.5	4.4
Hansen Creek (030102)	29,010	5.19	235.3	38.5	0.0	187.2	9.6
Ebey Hill (050214)	19,812	5.19	160.6	59.8	0.0	99.1	1.7
Acme (010311)	23,518	5.18	190.3	44.8	0.0	143.6	1.8
Tate (070409)	9,798	5.13	78.5	2.5	0.0	75.4	0.7
Lake Whatcom (010412)	35,957	5.06	284.1	129.3	0.0	125.6	29.3
Clearwater Creek (010328)	14,330	5.00	112.0	70.5	31.8	8.5	1.2
Jordan (050108)	21,252	4.97	165.0	8.1	1.8	152.2	2.9
Loretta (030104)	15,769	4.96	122.3	9.1	39.2	73.0	0.9
Raging River (070408)	22,853	4.87	174.0	50.5	0.0	121.7	1.8
French Boulder (050204)	45,327	4.82	341.3	47.5	245.9	45.1	2.7
Corkindale (040531)	24,194	4.67	176.6	11.8	93.5	59.5	11.9
Woods Creek (070223)	42,463	4.55	302.1	72.3	0.0	220.3	9.4
Jordan-Boulder (040224)	32,726	4.54	232.4	61.4	57.7	110.9	2.4
Upper NF Stilly (050202)	32,833	4.54	233.1	21.3	189.5	22.1	0.1
Youngs Creek (070219)	23,776	4.54	168.5	21.9	2.8	143.3	0.5
Deming (010226)	27,527	4.48	192.8	62.8	0.0	129.2	0.8
Nookachamps (030107)	47,730	4.47	333.7	105.3	0.0	223.2	5.2
Jim Creek (050109)	30,690	4.46	213.9	35.1	39.4	130.1	9.4
Grandy (040534)	18,856	4.44	130.9	22.3	0.0	107.0	1.6
Jackman (040529)	16,399	4.27	109.4	5.4	53.5	50.4	0.1
East Shannon (040436)	34,065	4.05	215.3	28.6	103.5	64.8	18.4
Cherry (070420)	38,183	4.00	238.3	53.3	0.0	170.3	14.7
Hilt (040322)	12,453	3.92	76.2	5.1	32.4	37.7	1.0
Marmot Ridge (010306)	31,794	3.90	194.0	45.6	100.5	41.2	6.7
Lower Pilchuck Creek (050313)	19,364	3.85	116.6	7.7	0.0	108.1	0.8
Canyon Creek (010232)	36,807	3.72	213.8	37.4	47.5	122.7	6.2
Samish River (030301)	57,397	3.56	319.3	71.6	0.0	236.1	11.7
Alder (030103)	22,865	3.51	125.3	86.0	0.0	39.0	0.4
Samish Bay (010414)	13,258	3.23	66.9	16.7	0.0	41.1	9.1
Vedder (010131)	21,272	3.06	101.7	15.8	0.1	85.7	0.0
Friday Creek (030313)	24,129	2.94	110.9	14.6	0.0	90.1	6.2
Sumas River (010125)	36,444	2.69	153.1	22.5	0.0	129.5	1.2

Table E-10. Overall Stream Density and Length in Each Watershed

Watershed Name (and Number)	Total Acres	Stream Density mi/sq mi	Total Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Cypress (030415)	4,950	2.54	19.6	15.6	0.0	3.9	0.2
Lummi Island (010617)	5,063	1.80	14.2	0.7	0.1	11.3	2.1
<i>Planning Unit Average</i>		<i>5.00</i>	<i>222.5</i>	<i>57.2</i>	<i>50.5</i>	<i>105.2</i>	<i>9.6</i>
Olympic Experimental State Forest							
Kalaloch Ridge (210115)	11,472	9.54	171.1	101.5	8.2	60.7	0.7
Lower Clearwater (210114)	45,246	8.72	616.1	286.9	19.5	293.9	15.9
Goodman-Mosquito (200610)	33,529	8.01	419.6	141.8	34.0	241.7	2.1
Upper Clearwater (210116)	58,265	7.83	713.0	700.8	3.4	8.8	0.1
Middle Hoh (200607)	46,272	7.74	559.5	385.9	15.8	146.3	11.5
Sekiu Coastal (190301)	27,412	7.68	329.1	37.0	0.0	274.8	17.3
Bogachiel (200412)	44,993	7.21	506.7	174.8	96.7	228.2	7.0
Hoh Lowlands (200608)	30,244	6.98	330.0	84.3	7.3	228.4	10.0
Sol Duc Valley (200316)	16,585	6.83	177.0	57.0	40.0	77.5	2.5
Quillayute Bottom (200417)	23,180	6.58	238.3	66.2	32.8	121.3	18.0
Hoko (190302)	44,534	6.43	447.3	107.9	2.3	325.3	11.8
Matheney-Salmon (210211)	21,630	6.39	215.8	14.3	75.5	2.4	123.7
Cedar (200609)	12,310	6.39	122.8	56.7	18.3	47.2	0.6
Ozette Lake (200120)	35,130	6.02	330.5	44.7	78.7	164.1	43.0
West Dickey (200419)	28,311	5.91	261.3	30.2	0.0	222.9	8.3
Sol Duc Lowlands (200416)	22,368	5.82	203.5	34.6	49.9	115.0	4.1
Sol Duc Valley (200201)	47,220	5.74	423.5	111.7	164.7	119.7	27.5
East Dickey (200418)	26,657	5.62	233.9	90.3	0.0	140.4	3.2
Pysht River (190204)	32,972	5.47	282.0	20.2	52.9	206.9	2.0
Clallam River (190303)	22,235	5.40	187.5	94.4	0.1	91.0	1.9
Queets Corridor South (210212)	29,667	5.27	244.3	36.3	208.1	0.0	0.0
Queets Corridor North (210213)	39,496	5.06	312.2	60.8	135.8	23.0	92.7
Rain Forest (200505)	56,435	4.84	427.1	75.6	340.8	0.3	10.4
<i>Planning Unit Average</i>		<i>6.59</i>	<i>337.1</i>	<i>122.3</i>	<i>60.2</i>	<i>136.5</i>	<i>18.0</i>
South Coast Planning Unit							
Naselle Headwaters (240107)	48,336	11.88	897.5	91.3	0.0	803.2	2.9
Lower Willapa (240315)	32,329	11.86	599.3	28.5	0.0	569.1	1.7
Lower Naselle (240108)	36,688	11.48	658.3	85.4	2.4	565.2	5.3
South Fork Willapa (240314)	26,664	11.16	464.9	163.8	0.0	289.5	11.7
Mill Creek (240305)	15,699	10.87	266.6	170.7	0.0	94.7	1.2
Willapa Headwaters (240306)	62,581	10.76	1052.4	321.3	0.0	719.2	12.0
Nemah (240212)	40,522	10.59	670.6	170.3	0.0	489.8	10.5
Palix (240213)	35,825	10.00	559.7	62.8	0.0	477.9	19.0
Elk Creek (230117)	38,773	9.87	597.9	193.9	0.0	381.4	22.5
Curtis (230112)	43,351	9.59	649.5	112.6	0.0	523.5	13.4
Rock-Jones (230116)	22,917	9.48	339.5	104.2	0.0	230.9	4.4
Elk River (220625)	32,340	9.15	462.1	60.7	0.0	259.1	142.4
Bunker Creek (230218)	22,788	8.67	308.7	87.9	0.0	220.0	0.8
Lower Skookumchuck (230404)	44,616	7.88	549.5	114.1	0.0	431.5	3.9
North River Headwaters (240402)	34,532	7.74	417.5	40.4	0.0	376.0	1.1
Garrard Creek (230220)	49,056	7.37	564.6	233.8	0.0	317.1	13.7
Lincoln Creek (230219)	48,086	6.95	522.5	168.0	0.0	348.3	6.2
Mox Chehalis (220106)	23,315	5.67	206.6	41.0	0.0	163.2	2.5
Joe-Moclips (210408)	50,805	5.09	403.7	33.7	0.3	179.0	190.7
Copalis River (210407)	40,529	5.01	317.2	23.8	0.0	230.8	62.6
Cedar Creek (230521)	32,505	4.92	250.1	194.3	0.0	38.7	17.0

Table E-10. Overall Stream Density and Length in Each Watershed

Watershed Name (and Number)	Total Acres	Stream Density mi/sq mi	Total Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Porter Creek (230522)	32,023	4.87	243.6	203.1	0.0	36.4	4.1
Waddel Creek (230501)	28,982	4.70	212.9	146.9	0.0	63.8	2.1
Scatter Creek (230403)	31,680	4.55	225.3	24.2	0.0	195.6	5.5
<i>Planning Unit Average</i>		<i>8.34</i>	<i>476.7</i>	<i>119.9</i>	<i>0.1</i>	<i>333.5</i>	<i>23.2</i>
South Puget Planning Unit							
North Fork Mineral (110112)	16,072	8.36	209.9	179.0	0.0	26.7	4.2
Catt (110108)	13,279	8.35	173.4	90.5	82.3	0.5	0.0
Mineral Creek (110110)	23,047	8.31	299.3	58.7	0.0	224.0	16.7
East Creek (110113)	14,429	7.89	178.0	34.7	48.9	89.4	5.0
Busy Wild (110204)	56,966	7.09	631.0	150.3	0.0	440.8	39.9
Ashford (110104)	27,680	7.07	305.9	75.8	85.0	134.0	11.1
Howard Hansen (090103)	46,472	6.80	493.5	157.1	3.3	209.5	123.6
North Fork Green (090104)	18,410	6.32	181.8	57.8	0.0	107.0	17.0
Reese Creek (110106)	5,036	5.77	45.4	43.9	0.0	1.4	0.0
Hood (150201)	145,611	4.10	932.1	207.1	15.4	621.9	87.7
Tiger (080303)	40,881	3.76	240.0	84.6	0.0	123.6	31.7
Summit Lake (140002)	29,140	3.65	166.1	49.6	0.0	113.1	3.4
Cumberland (090202)	26,260	3.52	144.3	17.0	0.0	101.9	25.3
Squaxin (140003)	1,066	3.27	5.5	1.1	0.0	0.1	4.3
Olympia (130202)	18,529	3.00	86.7	22.0	0.0	62.0	2.8
<i>Planning Unit Average</i>		<i>5.82</i>	<i>272.8</i>	<i>82.0</i>	<i>15.7</i>	<i>150.4</i>	<i>24.8</i>
Straits Planning Unit							
Twins (190206)	20,351	4.74	150.8	55.1	68.5	25.7	1.6
Dabob (170106)	16,871	4.69	123.7	32.2	0.0	88.7	2.8
Thorndike (170105)	16,587	4.68	121.3	11.4	6.7	101.1	2.1
Lilliwaup (160204)	29,080	4.59	208.5	123.8	17.2	63.2	4.2
Ludlow (170104)	22,897	4.44	158.7	10.7	0.1	144.1	3.8
Lyre (190107)	11,021	4.23	72.8	47.7	9.3	13.9	1.8
Dungeness Valley (180103)	43,200	4.05	273.5	31.2	63.9	170.0	8.3
Chimakum (170203)	28,202	3.58	157.6	10.0	7.4	135.0	5.2
Little Quil (170107)	28,536	3.54	157.8	11.4	50.5	94.9	0.9
Sequim Bay (170201)	26,752	3.48	145.6	43.9	42.1	55.0	4.6
Sutherland-Aldwell (180310)	35,109	3.43	188.2	36.2	61.5	71.0	19.5
Siebert McDonald (180202)	35,481	3.17	176.0	45.5	45.4	83.0	2.1
Hamma Hamma (160203)	69,941	3.15	343.9	73.5	214.6	53.9	1.9
Salt (190108)	26,336	3.07	126.1	51.9	0.0	66.3	8.0
Big Quil (170108)	51,823	3.00	242.8	22.0	184.8	33.6	2.4
Bell Creek (180104)	5,969	2.96	27.6	1.1	0.0	26.0	0.5
Port Angeles (180211)	24,883	2.76	107.4	26.5	9.6	67.2	4.1
Discovery Bay (170202)	58,871	2.64	242.5	35.2	48.7	147.4	11.2
<i>Planning Unit Average</i>		<i>3.68</i>	<i>168.0</i>	<i>37.2</i>	<i>46.1</i>	<i>80.0</i>	<i>4.7</i>

1/ Includes privately owned industrial and non-industrial (i.e., small landowner) lands.

2/ Includes municipal, tribal, non-DNR State lands, and other lands.

Table E-11. Resident Fish Stream Density and Length in Each Watershed

Watershed Name (and Number)	Resident Fish Stream		Total Resident Fish Stream Miles	Miles Breakdown by Ownership			
	Total Acres	Density mi/sq mi		DNR	Federal	Private ^{1/}	Other ^{2/}
	Columbia Planning Unit						
Woodland (270412)	37,827	2.51	148.3	5.3	0.8	128.2	14.0
Main Elochoman (250208)	37,009	2.25	129.8	8.5	10.7	69.1	41.5
Grays Bay (250310)	56,613	2.21	195.6	8.6	0.0	139.9	47.1
Little Washougal (280203)	30,269	1.95	92.0	6.5	0.7	79.0	5.8
Harmony (260330)	22,546	1.88	66.4	2.3	0.0	58.6	5.5
Lake Merwin (270415)	46,439	1.87	136.0	18.9	0.4	116.4	0.2
Bremer (260331)	19,894	1.87	58.2	7.5	1.3	41.0	8.4
Spirit Lake (260507)	52,151	1.87	152.0	1.3	147.9	0.0	2.8
Skamokawa (250209)	51,687	1.73	140.1	14.9	13.1	73.8	38.3
Green River (260515)	46,383	1.68	121.6	2.7	0.0	112.0	6.9
Lower Kalama (270113)	49,823	1.61	125.6	2.4	0.0	107.3	15.9
South Fork Toutle (260513)	42,623	1.60	106.4	18.6	0.0	86.5	1.3
Hamilton Creek (280106)	32,845	1.53	78.6	6.4	21.9	24.7	25.7
Delameter (260623)	37,243	1.53	89.0	2.9	0.0	86.0	0.1
Abernethy (250104)	40,071	1.45	90.5	39.1	0.4	35.9	15.0
North Fork Toutle (260514)	41,051	1.40	90.1	9.6	0.0	66.0	14.6
Salmon Creek (260421)	43,837	1.39	95.5	2.5	0.0	87.8	5.3
West Fork Grays River (250311)	10,347	1.39	22.5	2.1	0.0	20.0	0.5
Rock Creek (290415)	41,733	1.39	90.8	19.4	0.0	50.0	21.4
Mill Creek (260429)	26,163	1.39	56.6	1.6	0.0	54.2	0.8
South Fork Grays River (250302)	16,774	1.37	36.0	11.0	0.0	24.9	0.1
Silverstar (280204)	32,719	1.36	69.7	9.5	7.2	49.2	3.8
Swift Creek (270304)	74,150	1.34	155.6	31.6	26.6	91.6	5.8
Stillwater (260625)	28,905	1.32	59.7	3.0	0.0	56.7	0.0
Cedar Creek (270416)	36,416	1.27	72.3	1.7	0.9	67.4	2.2
Cedar Creek (260428)	14,441	1.25	28.2	0.5	0.0	26.9	0.8
North Elochoman (250203)	23,518	1.22	44.7	9.2	0.0	35.1	0.3
Middle Kalama (270114)	51,534	1.21	97.4	2.3	0.0	95.1	0.0
Cougar (270317)	32,888	1.20	61.6	10.2	0.4	49.9	1.0
Upper Washougal (280205)	31,719	1.16	57.5	41.6	0.0	14.7	1.2
Rock Creek Clark (270508)	35,440	1.10	60.8	5.8	1.5	49.3	4.2
Upper SF Toutle (260508)	40,031	1.09	68.5	19.3	13.7	32.0	3.6
Winston (260320)	28,321	1.06	47.1	9.7	0.0	35.3	2.0
Lacamas (280202)	41,185	1.05	67.3	2.6	6.1	49.8	8.7
Olequa (260626)	35,017	1.00	54.7	2.1	0.0	52.4	0.2
Cold Creek (270509)	21,281	0.99	32.8	19.0	0.0	13.5	0.2
Wind River (290414)	30,669	0.90	43.3	1.8	11.9	26.3	3.3
Siouxon (270305)	39,066	0.56	34.3	24.3	6.6	3.2	0.2
Planning Unit Average		1.45	83.6	10.2	7.2	58.1	8.1
North Puget Planning Unit							
Jordan (050108)	21,252	3.11	103.3	0.5	0.0	100.5	2.2
Kenney Creek (010230)	2,791	2.82	12.3	0.0	0.0	12.3	0.0
Rinker (040321)	20,481	2.68	85.7	14.8	7.1	56.9	6.9
Tate (070409)	9,798	2.57	39.4	0.0	0.0	38.8	0.6
Hutchinson Creek (010310)	13,975	2.50	54.5	16.1	0.0	38.2	0.2
Cherry (070420)	38,183	2.42	144.7	28.4	0.0	105.3	11.1
Gilligan (030106)	18,879	2.42	71.5	3.4	0.0	57.0	11.1
Ebey Hill (050214)	19,812	2.38	73.7	14.5	0.0	57.9	1.3
Woods Creek (070223)	42,463	2.32	154.2	19.2	0.0	129.7	5.3

Table E-11. Resident Fish Stream Density and Length in Each Watershed

Watershed Name (and Number)	Resident Fish Stream						
	Total Acres	Density mi/sq mi	Total Resident Fish Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Sultan River (070224)	24,388	2.21	84.4	29.6	7.2	31.5	16.1
Nookachamps (030107)	47,730	2.16	160.9	18.7	0.0	137.3	4.8
Pilchuck Mtn (070226)	42,517	2.14	142.0	72.1	0.2	67.4	2.3
Olney Creek (070225)	20,655	2.09	67.5	9.7	0.0	57.9	0.0
Tolt (070415)	63,357	2.09	206.4	22.3	7.4	129.9	46.8
Acme (010311)	23,518	2.08	76.5	5.2	0.0	69.7	1.6
Porter Canyon (010327)	18,550	2.08	60.2	15.3	0.0	38.1	6.8
Hansen Creek (030102)	29,010	2.00	90.6	2.4	0.0	79.8	8.5
Lower MF Snoqualmie (070307)	28,375	1.96	87.1	30.8	17.5	34.9	3.8
Sauk Prairie (040320)	14,137	1.92	42.5	9.1	0.9	26.7	5.7
Lower Pilchuck Creek (050313)	19,364	1.91	57.8	4.2	0.0	52.9	0.6
Verlot (050107)	23,540	1.90	70.0	5.7	30.5	33.0	0.8
Stimson Hill (050215)	18,833	1.87	55.1	8.5	0.0	45.4	1.2
Youngs Creek (070219)	23,776	1.82	67.5	5.1	0.0	62.4	0.0
Deming (010226)	27,527	1.81	78.0	7.2	0.0	70.2	0.6
Warnick (010229)	25,436	1.77	70.5	23.2	1.5	45.6	0.3
North Fork Snoqualmie (070313)	66,707	1.74	181.4	3.5	54.6	110.1	13.2
Lake Whatcom (010412)	35,957	1.65	92.9	6.0	0.0	58.2	28.7
Loretta (030104)	15,769	1.60	39.4	1.5	2.7	34.7	0.6
Raging River (070408)	22,853	1.59	56.6	10.0	0.0	46.2	0.4
West Shannon (040435)	14,333	1.58	35.5	3.3	0.0	17.8	14.4
Samish Bay (010414)	13,258	1.55	32.0	4.6	0.0	21.6	5.9
Wallace River (070217)	24,667	1.52	58.5	7.0	11.6	26.8	13.2
Jim Creek (050109)	30,690	1.51	72.3	7.4	16.7	46.5	1.7
Hazel (050203)	24,179	1.47	55.5	12.8	6.8	35.6	0.2
South Snoqualmie (070306)	57,077	1.46	130.3	3.8	53.2	54.2	19.0
Corkindale (040531)	24,194	1.45	55.0	1.0	10.9	33.6	9.4
Hilt (040322)	12,453	1.43	27.8	0.8	5.1	20.9	1.0
Friday Creek (030313)	24,129	1.42	53.5	1.3	0.0	46.8	5.4
Cavanaugh (050316)	29,722	1.41	65.6	21.9	0.0	43.6	0.1
Alder (030103)	22,865	1.39	49.8	19.4	0.0	30.0	0.4
Tenas (040319)	36,688	1.31	74.9	19.3	34.4	17.0	4.3
Grandy (040534)	18,856	1.30	38.3	0.7	0.0	36.4	1.2
Howard Creek (010308)	39,040	1.28	77.8	6.0	5.1	54.4	12.4
Spada (070216)	44,197	1.23	84.8	29.9	3.7	1.1	50.1
Lummi Island (010617)	5,063	1.21	9.6	0.6	0.1	7.4	1.5
Skookum Creek (010309)	23,905	1.21	45.1	14.4	0.5	30.0	0.3
Sumas River (010125)	36,444	1.19	67.8	1.5	0.0	65.1	1.2
Deer Creek (050201)	41,881	1.17	76.4	17.3	34.7	24.3	0.1
Silverton (050106)	46,399	1.14	82.9	4.0	72.3	5.4	1.2
French Boulder (050204)	45,327	1.13	80.1	25.4	24.6	28.7	1.3
Cypress (030415)	4,950	1.11	8.6	6.8	0.0	1.6	0.2
Jordan-Boulder (040224)	32,726	1.02	52.4	12.4	0.5	37.4	2.0
Samish River (030301)	57,397	0.98	88.1	2.9	0.0	84.0	1.1
East Shannon (040436)	34,065	0.87	46.1	4.4	8.6	14.9	18.2
Day Creek (030105)	22,203	0.79	27.3	0.4	1.3	25.5	0.1
Canyon Creek (010232)	36,807	0.65	37.6	5.2	0.3	26.4	5.7
Upper NF Stilly (050202)	32,833	0.64	33.0	4.8	26.3	1.9	0.0
Clearwater Creek (010328)	14,330	0.63	14.2	8.7	3.9	1.0	0.6
Vedder (010131)	21,272	0.60	19.9	4.6	0.0	15.3	0.0

Table E-11. Resident Fish Stream Density and Length in Each Watershed

Watershed Name (and Number)	Resident Fish Stream						
	Total Acres	Density mi/sq mi	Total Resident Fish Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Marmot Ridge (010306)	31,794	0.51	25.4	11.0	0.6	7.2	6.6
Jackman (040529)	16,399	0.44	11.2	0.4	0.3	10.4	0.0
<i>Planning Unit Average</i>		<i>1.61</i>	<i>68.3</i>	<i>10.7</i>	<i>7.4</i>	<i>44.3</i>	<i>5.9</i>
Olympic Experimental State Forest							
Hoh Lowlands (200608)	30,244	3.63	171.7	36.3	2.8	125.9	6.6
Sol Duc Lowlands (200416)	22,368	3.07	107.4	14.1	5.6	84.9	2.8
Middle Hoh (200607)	46,272	2.97	214.7	90.8	9.0	104.3	10.7
West Dickey (200419)	28,311	2.64	116.9	14.9	0.0	94.9	7.1
Sol Duc Valley (200316)	16,585	2.62	68.0	11.5	2.9	52.5	1.2
Quillayute Bottom (200417)	23,180	2.59	93.8	20.0	13.7	52.6	7.4
Queets Corridor North (210213)	39,496	2.46	151.6	24.8	66.0	5.1	55.7
Ozette Lake (200120)	35,130	2.40	131.6	9.1	31.9	49.3	41.3
Sol Duc Valley (200201)	47,220	2.28	168.4	41.6	32.5	70.4	24.0
Lower Clearwater (210114)	45,246	2.28	161.2	55.7	2.7	96.4	6.4
Bogachiel (200412)	44,993	2.25	158.4	40.7	15.9	97.2	4.6
East Dickey (200418)	26,657	2.09	87.0	30.2	0.0	55.7	1.1
Hoko (190302)	44,534	1.97	136.8	26.2	0.6	102.7	7.4
Cedar (200609)	12,310	1.81	34.8	11.5	7.0	16.2	0.2
Pysht River (190204)	32,972	1.73	89.3	1.1	4.7	82.8	0.7
Kalaloch Ridge (210115)	11,472	1.73	30.9	11.9	3.4	15.4	0.2
Rain Forest (200505)	56,435	1.66	146.6	12.4	123.7	0.3	10.3
Clallam River (190303)	22,235	1.65	57.2	28.9	0.0	26.7	1.6
Upper Clearwater (210116)	58,265	1.62	147.5	146.1	0.4	1.0	0.1
Goodman-Mosquito (200610)	33,529	1.61	84.2	32.7	15.2	35.2	1.1
Sekiu Coastal (190301)	27,412	1.59	68.2	5.0	0.0	61.0	2.2
Queets Corridor South (210212)	29,667	0.77	35.7	18.6	17.1	0.0	0.0
Matheney-Salmon (210211)	21,630	0.66	22.4	4.6	3.9	0.7	13.2
<i>Planning Unit Average</i>		<i>2.09</i>	<i>108.0</i>	<i>29.9</i>	<i>15.6</i>	<i>53.5</i>	<i>9.0</i>
South Coast Planning Unit							
Lower Willapa (240315)	32,329	2.93	147.8	1.2	0.0	145.9	0.7
Copalis River (210407)	40,529	2.88	182.2	16.9	0.0	122.8	42.5
Lower Naselle (240108)	36,688	2.40	137.5	13.0	0.7	121.7	2.1
North River Headwaters (240402)	34,532	2.38	128.6	9.1	0.0	118.8	0.6
Palix (240213)	35,825	2.30	128.7	18.4	0.0	106.0	4.2
South Fork Willapa (240314)	26,664	2.15	89.5	21.4	0.0	66.1	2.1
Naselle Headwaters (240107)	48,336	2.10	158.9	10.7	0.0	147.6	0.6
Garrard Creek (230220)	49,056	2.08	159.4	34.8	0.0	113.1	11.5
Lower Skookumchuck (230404)	44,616	2.08	144.7	12.0	0.0	130.5	2.2
Curtis (230112)	43,351	2.06	139.7	14.9	0.0	121.1	3.6
Elk Creek (230117)	38,773	2.04	123.8	31.9	0.0	87.6	4.3
Nemah (240212)	40,522	2.04	129.2	32.0	0.0	94.0	3.1
Mox Chehalis (220106)	23,315	1.96	71.5	9.1	0.0	62.1	0.3
Rock-Jones (230116)	22,917	1.91	68.3	14.0	0.0	53.5	0.8
Cedar Creek (230521)	32,505	1.89	95.9	66.1	0.0	17.1	12.7
Lincoln Creek (230219)	48,086	1.89	141.9	27.2	0.0	110.7	4.0
Porter Creek (230522)	32,023	1.85	92.5	70.7	0.0	19.1	2.8
Elk River (220625)	32,340	1.84	93.0	17.5	0.0	51.7	23.8
Waddel Creek (230501)	28,982	1.79	81.1	42.6	0.0	36.6	1.9
Joe-Moclips (210408)	50,805	1.79	142.0	8.7	0.3	70.1	62.9

Table E-11. Resident Fish Stream Density and Length in Each Watershed

Watershed Name (and Number)	Resident Fish Stream Total Resident						
	Total Acres	Density mi/sq mi	Fish Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Mill Creek (240305)	15,699	1.73	42.4	28.5	0.0	13.7	0.2
Willapa Headwaters (240306)	62,581	1.68	164.5	35.8	0.0	124.9	3.9
Bunker Creek (230218)	22,788	1.68	59.9	12.0	0.0	47.8	0.1
Scatter Creek (230403)	31,680	1.27	62.8	4.0	0.0	55.1	3.6
<i>Planning Unit Average</i>		<i>2.03</i>	<i>116.1</i>	<i>23.0</i>	<i>0.0</i>	<i>84.9</i>	<i>8.1</i>
South Puget Planning Unit							
Ashford (110104)	27,680	2.43	105.3	21.3	9.8	67.1	7.2
Squaxin (140003)	1,066	2.36	3.9	0.6	0.0	0.1	3.3
East Creek (110113)	14,429	1.85	41.6	4.0	3.2	32.5	1.9
Hood (150201)	145,611	1.72	392.2	81.4	3.9	267.2	39.7
Olympia (130202)	18,529	1.46	42.2	8.1	0.0	32.4	1.7
Summit Lake (140002)	29,140	1.45	66.1	11.2	0.0	52.2	2.7
Howard Hansen (090103)	46,472	1.45	105.3	13.0	0.0	21.3	70.9
Busy Wild (110204)	56,966	1.42	126.4	37.5	0.0	81.2	7.8
Cumberland (090202)	26,260	1.21	49.5	1.6	0.0	25.6	22.3
Mineral Creek (110110)	23,047	1.15	41.6	3.6	0.0	36.8	1.2
North Fork Mineral (110112)	16,072	0.88	22.1	16.1	0.0	4.5	1.5
Tiger (080303)	40,881	0.87	55.5	5.5	0.0	43.5	6.5
Reese Creek (110106)	5,036	0.82	6.5	5.5	0.0	1.0	0.0
Catt (110108)	13,279	0.81	16.8	10.1	6.7	0.0	0.0
North Fork Green (090104)	18,410	0.71	20.5	1.9	0.0	13.4	5.2
<i>Planning Unit Average</i>		<i>1.37</i>	<i>73.0</i>	<i>14.8</i>	<i>1.6</i>	<i>45.2</i>	<i>11.5</i>
Straits Planning Unit							
Dungeness Valley (180103)	43,200	2.12	143.4	15.5	5.2	117.1	5.6
Dabob (170106)	16,871	1.66	43.7	15.1	0.0	26.3	2.3
Thorndike (170105)	16,587	1.49	38.6	2.6	0.5	34.6	0.8
Ludlow (170104)	22,897	1.41	50.3	1.0	0.1	46.4	2.8
Bell Creek (180104)	5,969	1.34	12.5	0.7	0.0	11.4	0.4
Lilliwaup (160204)	29,080	1.33	60.2	35.7	0.0	21.6	3.0
Sutherland-Aldwell (180310)	35,109	1.30	71.3	8.2	6.9	41.7	14.6
Little Quil (170107)	28,536	1.11	49.5	5.3	1.1	42.4	0.7
Siebert McDonald (180202)	35,481	1.10	61.0	28.3	1.7	29.8	1.3
Port Angeles (180211)	24,883	1.09	42.4	5.6	1.4	33.5	1.9
Chimakum (170203)	28,202	1.08	47.7	4.9	3.9	35.5	3.3
Salt (190108)	26,336	0.97	39.8	8.8	0.0	26.9	4.1
Sequim Bay (170201)	26,752	0.87	36.4	7.1	3.8	24.0	1.5
Lyre (190107)	11,021	0.82	14.1	8.5	0.0	4.9	0.6
Twins (190206)	20,351	0.80	25.5	12.4	7.1	5.3	0.7
Discovery Bay (170202)	58,871	0.74	67.8	11.5	3.3	49.9	3.1
Big Quil (170108)	51,823	0.46	37.1	9.2	12.9	13.4	1.6
Hamma Hamma (160203)	69,941	0.45	49.2	18.7	2.4	26.4	1.5
<i>Planning Unit Average</i>		<i>1.12</i>	<i>49.5</i>	<i>11.1</i>	<i>2.8</i>	<i>32.8</i>	<i>2.8</i>

1/ Includes privately owned industrial and non-industrial (i.e., small landowner) lands.

2/ Includes municipal, tribal, non-DNR State lands, and other lands.

Table E-12. Bull Trout Stream Density and Length in Each Watershed

Watershed Name (and Number)	Total Acres	Bull Trout		Total Bull Trout Stream Miles	Miles Breakdown by Ownership			
		Stream Density mi/sq mi	Miles		DNR	Federal	Private ^{1/}	Other ^{2/}
Columbia Planning Unit								
Cougar (270317)	32,888	0.27	14.0	1.8	0.3	11.6	0.3	
Woodland (270412)	37,827	0.24	14.4	0.0	0.0	14.4	0.0	
Lake Merwin (270415)	46,439	0.24	17.3	0.3	0.0	17.0	0.0	
Swift Creek (270304)	74,150	0.15	16.9	3.1	1.0	12.2	0.5	
Rock Creek (290415)	41,733	0.07	4.6	0.0	0.0	0.0	4.6	
Cedar Creek (270416)	36,416	0.02	0.9	0.0	0.0	0.9	0.0	
Wind River (290414)	30,669	0.01	0.7	0.0	0.7	0.0	0.0	
Lower Kalama (270113)	49,823	0.01	0.8	0.0	0.0	0.8	0.0	
Siouxon (270305)	39,066	0.00	0.1	0.0	0.0	0.1	0.0	
Hamilton Creek (280106)	32,845	0.00	0.0	0.0	0.0	0.0	0.0	
Grays Bay (250310)	56,613	0.00	0.0	0.0	0.0	0.0	0.0	
Cedar Creek (260428)	14,441	0.00	0.0	0.0	0.0	0.0	0.0	
Skamokawa (250209)	51,687	0.00	0.0	0.0	0.0	0.0	0.0	
South Fork Grays River (250302)	16,774	0.00	0.0	0.0	0.0	0.0	0.0	
Delameter (260623)	37,243	0.00	0.0	0.0	0.0	0.0	0.0	
Salmon Creek (260421)	43,837	0.00	0.0	0.0	0.0	0.0	0.0	
Mill Creek (260429)	26,163	0.00	0.0	0.0	0.0	0.0	0.0	
Stillwater (260625)	28,905	0.00	0.0	0.0	0.0	0.0	0.0	
West Fork Grays River (250311)	10,347	0.00	0.0	0.0	0.0	0.0	0.0	
Harmony (260330)	22,546	0.00	0.0	0.0	0.0	0.0	0.0	
Olequa (260626)	35,017	0.00	0.0	0.0	0.0	0.0	0.0	
Green River (260515)	46,383	0.00	0.0	0.0	0.0	0.0	0.0	
North Fork Toutle (260514)	41,051	0.00	0.0	0.0	0.0	0.0	0.0	
Winston (260320)	28,321	0.00	0.0	0.0	0.0	0.0	0.0	
Main Elochoman (250208)	37,009	0.00	0.0	0.0	0.0	0.0	0.0	
South Fork Toutle (260513)	42,623	0.00	0.0	0.0	0.0	0.0	0.0	
Abernethy (250104)	40,071	0.00	0.0	0.0	0.0	0.0	0.0	
North Elochoman (250203)	23,518	0.00	0.0	0.0	0.0	0.0	0.0	
Middle Kalama (270114)	51,534	0.00	0.0	0.0	0.0	0.0	0.0	
Bremer (260331)	19,894	0.00	0.0	0.0	0.0	0.0	0.0	
Spirit Lake (260507)	52,151	0.00	0.0	0.0	0.0	0.0	0.0	
Rock Creek Clark (270508)	35,440	0.00	0.0	0.0	0.0	0.0	0.0	
Silverstar (280204)	32,719	0.00	0.0	0.0	0.0	0.0	0.0	
Upper Washougal (280205)	31,719	0.00	0.0	0.0	0.0	0.0	0.0	
Upper SF Toutle (260508)	40,031	0.00	0.0	0.0	0.0	0.0	0.0	
Lacamas (280202)	41,185	0.00	0.0	0.0	0.0	0.0	0.0	
Cold Creek (270509)	21,281	0.00	0.0	0.0	0.0	0.0	0.0	
Little Washougal (280203)	30,269	0.00	0.0	0.0	0.0	0.0	0.0	
Planning Unit Average		0.03	1.8	0.1	0.1	1.5	0.1	
North Puget Planning Unit								
Jordan (050108)	21,252	0.70	23.1	0.0	0.0	23.0	0.1	
Gilligan (030106)	18,879	0.56	16.4	0.1	0.0	13.5	2.9	
Alder (030103)	22,865	0.50	17.9	5.4	0.0	12.4	0.1	
Stimson Hill (050215)	18,833	0.50	14.7	0.4	0.0	13.6	0.7	
Hansen Creek (030102)	29,010	0.49	22.3	0.0	0.0	21.7	0.7	
Rinker (040321)	20,481	0.46	14.6	1.7	0.1	12.0	0.8	
Porter Canyon (010327)	18,550	0.45	13.2	3.0	0.0	8.8	1.3	
Loretta (030104)	15,769	0.45	11.1	0.2	0.0	10.9	0.0	

Table E-12. Bull Trout Stream Density and Length in Each Watershed

Watershed Name (and Number)	Bull Trout						
	Total Acres	Stream Density mi/sq mi	Total Bull Trout Stream Miles	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{1/}	Other ^{2/}
Verlot (050107)	23,540	0.42	15.4	1.1	5.8	8.5	0.0
Deer Creek (050201)	41,881	0.42	27.3	7.4	8.2	11.6	0.1
Kenney Creek (010230)	2,791	0.41	1.8	0.0	0.0	1.8	0.0
Ebey Hill (050214)	19,812	0.41	12.7	0.1	0.0	11.9	0.7
Howard Creek (010308)	39,040	0.41	24.8	1.4	1.0	17.6	4.8
Sauk Prairie (040320)	14,137	0.36	8.0	1.2	0.0	4.9	1.9
Lower Pilchuck Creek (050313)	19,364	0.36	10.9	0.0	0.0	10.9	0.0
Silverton (050106)	46,399	0.36	26.0	0.0	23.5	1.7	0.8
Jim Creek (050109)	30,690	0.33	15.6	2.5	1.5	11.6	0.0
Warnick (010229)	25,436	0.32	12.9	1.2	0.7	11.0	0.0
Acme (010311)	23,518	0.32	11.6	0.0	0.0	11.4	0.3
Woods Creek (070223)	42,463	0.29	19.6	1.5	0.0	18.0	0.0
Hilt (040322)	12,453	0.29	5.7	0.2	0.0	5.3	0.2
Sultan River (070224)	24,388	0.29	10.9	3.0	0.0	5.9	2.1
Corkindale (040531)	24,194	0.27	10.4	0.0	0.3	8.0	2.1
Olney Creek (070225)	20,655	0.27	8.8	0.5	0.0	8.3	0.0
Hazel (050203)	24,179	0.27	10.2	1.2	0.0	9.0	0.0
Marmot Ridge (010306)	31,794	0.27	13.2	3.2	5.6	2.4	2.0
Grandy (040534)	18,856	0.26	7.6	0.0	0.0	6.9	0.6
Wallace River (070217)	24,667	0.26	9.9	0.2	0.0	7.6	2.1
Nookachamps (030107)	47,730	0.23	17.4	0.0	0.0	17.3	0.1
Jordan-Boulder (040224)	32,726	0.23	11.8	2.5	1.3	7.7	0.4
Pilchuck Mtn (070226)	42,517	0.22	14.4	6.0	0.0	8.3	0.1
French Boulder (050204)	45,327	0.21	14.6	4.4	0.7	9.2	0.2
Hutchinson Creek (010310)	13,975	0.20	4.4	0.4	0.0	4.0	0.0
Deming (010226)	27,527	0.20	8.6	0.0	0.0	8.5	0.1
Tenas (040319)	36,688	0.19	11.0	2.8	2.8	4.1	1.3
Skookum Creek (010309)	23,905	0.19	7.1	3.3	0.0	3.8	0.0
Tolt (070415)	63,357	0.19	18.5	0.0	0.0	17.7	0.8
Youngs Creek (070219)	23,776	0.18	6.8	0.0	0.0	6.8	0.0
East Shannon (040436)	34,065	0.15	7.9	0.0	3.8	0.7	3.4
Canyon Creek (010232)	36,807	0.14	8.1	1.1	0.7	6.2	0.0
West Shannon (040435)	14,333	0.14	3.2	0.0	0.0	0.1	3.1
Tate (070409)	9,798	0.11	1.6	0.0	0.0	1.4	0.2
Raging River (070408)	22,853	0.08	2.8	0.0	0.0	2.8	0.0
Day Creek (030105)	22,203	0.07	2.6	0.0	0.0	2.6	0.0
Clearwater Creek (010328)	14,330	0.06	1.3	0.8	0.0	0.2	0.3
Jackman (040529)	16,399	0.05	1.4	0.0	0.0	1.4	0.0
Cherry (070420)	38,183	0.02	1.3	0.0	0.0	1.1	0.2
Upper NF Stilly (050202)	32,833	0.02	1.1	0.5	0.0	0.7	0.0
Friday Creek (030313)	24,129	0.00	0.0	0.0	0.0	0.0	0.0
Samish Bay (010414)	13,258	0.00	0.0	0.0	0.0	0.0	0.0
Samish River (030301)	57,397	0.00	0.0	0.0	0.0	0.0	0.0
Lummi Island (010617)	5,063	0.00	0.0	0.0	0.0	0.0	0.0
Cypress (030415)	4,950	0.00	0.0	0.0	0.0	0.0	0.0
Lake Whatcom (010412)	35,957	0.00	0.0	0.0	0.0	0.0	0.0
Sumas River (010125)	36,444	0.00	0.0	0.0	0.0	0.0	0.0
Vedder (010131)	21,272	0.00	0.0	0.0	0.0	0.0	0.0
Cavanaugh (050316)	29,722	0.00	0.0	0.0	0.0	0.0	0.0

Table E-12. Bull Trout Stream Density and Length in Each Watershed

Watershed Name (and Number)	Bull Trout			Miles Breakdown by Ownership			
	Total Acres	Stream Density mi/sq mi	Total Bull Trout Stream Miles				
				DNR	Federal	Private ^{1/}	Other ^{2/}
Lower MF Snoqualmie (070307)	28,375	0.00	0.0	0.0	0.0	0.0	0.0
South Snoqualmie (070306)	57,077	0.00	0.0	0.0	0.0	0.0	0.0
North Fork Snoqualmie (070313)	66,707	0.00	0.0	0.0	0.0	0.0	0.0
Spada (070216)	44,197	0.00	0.0	0.0	0.0	0.0	0.0
<i>Planning Unit Average</i>		<i>0.22</i>	<i>8.9</i>	<i>0.9</i>	<i>0.9</i>	<i>6.5</i>	<i>0.6</i>
Olympic Experimental State Forest							
Queets Corridor North (210213)	39,496	0.41	25.4	0.0	16.1	0.0	9.3
Rain Forest (200505)	56,435	0.31	27.7	1.9	22.4	0.3	3.1
Hoh Lowlands (200608)	30,244	0.31	14.8	1.3	0.3	12.7	0.6
Lower Clearwater (210114)	45,246	0.26	18.5	2.1	0.1	15.1	1.1
Middle Hoh (200607)	46,272	0.22	15.6	1.5	1.4	10.3	2.5
Queets Corridor South (210212)	29,667	0.06	2.7	0.0	2.7	0.0	0.0
Matheney-Salmon (210211)	21,630	0.03	1.1	0.0	1.1	0.0	0.0
Goodman-Mosquito (200610)	33,529	0.02	1.1	0.0	1.1	0.0	0.0
Upper Clearwater (210116)	58,265	0.01	1.0	1.0	0.0	0.0	0.0
West Dickey (200419)	28,311	0.00	0.0	0.0	0.0	0.0	0.0
Sekiu Coastal (190301)	27,412	0.00	0.0	0.0	0.0	0.0	0.0
Hoko (190302)	44,534	0.00	0.0	0.0	0.0	0.0	0.0
East Dickey (200418)	26,657	0.00	0.0	0.0	0.0	0.0	0.0
Pysht River (190204)	32,972	0.00	0.0	0.0	0.0	0.0	0.0
Clallam River (190303)	22,235	0.00	0.0	0.0	0.0	0.0	0.0
Sol Duc Valley (200201)	47,220	0.00	0.0	0.0	0.0	0.0	0.0
Quillayute Bottom (200417)	23,180	0.00	0.0	0.0	0.0	0.0	0.0
Ozette Lake (200120)	35,130	0.00	0.0	0.0	0.0	0.0	0.0
Cedar (200609)	12,310	0.00	0.0	0.0	0.0	0.0	0.0
Sol Duc Lowlands (200416)	22,368	0.00	0.0	0.0	0.0	0.0	0.0
Kalaloch Ridge (210115)	11,472	0.00	0.0	0.0	0.0	0.0	0.0
Bogachiel (200412)	44,993	0.00	0.0	0.0	0.0	0.0	0.0
Sol Duc Valley (200316)	16,585	0.00	0.0	0.0	0.0	0.0	0.0
<i>Planning Unit Average</i>		<i>0.07</i>	<i>4.7</i>	<i>0.3</i>	<i>2.0</i>	<i>1.7</i>	<i>0.7</i>
South Coast Planning Unit							
Joe-Moclips (210408)	50,805	0.44	34.7	2.0	0.0	15.4	17.4
Copalis River (210407)	40,529	0.43	27.3	1.9	0.0	19.2	6.1
Garrard Creek (230220)	49,056	0.16	12.5	0.1	0.0	8.2	4.2
Mox Chehalis (220106)	23,315	0.10	3.7	0.0	0.0	3.7	0.0
Cedar Creek (230521)	32,505	0.05	2.3	0.0	0.0	1.5	0.8
Porter Creek (230522)	32,023	0.03	1.6	0.0	0.0	1.0	0.6
Lincoln Creek (230219)	48,086	0.01	0.6	0.0	0.0	0.1	0.5
Elk River (220625)	32,340	0.00	0.0	0.0	0.0	0.0	0.0
Lower Willapa (240315)	32,329	0.00	0.0	0.0	0.0	0.0	0.0
Elk Creek (230117)	38,773	0.00	0.0	0.0	0.0	0.0	0.0
Mill Creek (240305)	15,699	0.00	0.0	0.0	0.0	0.0	0.0
Rock-Jones (230116)	22,917	0.00	0.0	0.0	0.0	0.0	0.0
Nemah (240212)	40,522	0.00	0.0	0.0	0.0	0.0	0.0
Palix (240213)	35,825	0.00	0.0	0.0	0.0	0.0	0.0
North River Headwaters (240402)	34,532	0.00	0.0	0.0	0.0	0.0	0.0
South Fork Willapa (240314)	26,664	0.00	0.0	0.0	0.0	0.0	0.0

Table E-12. Bull Trout Stream Density and Length in Each Watershed

Watershed Name (and Number)	Bull Trout				Miles Breakdown by Ownership			
	Total Acres	Stream Density mi/sq mi	Total Bull Trout Stream Miles		DNR	Federal	Private ^{1/}	Other ^{2/}
Willapa Headwaters (240306)	62,581	0.00	0.0		0.0	0.0	0.0	0.0
Lower Naselle (240108)	36,688	0.00	0.0		0.0	0.0	0.0	0.0
Naselle Headwaters (240107)	48,336	0.00	0.0		0.0	0.0	0.0	0.0
Lower Skookumchuck (230404)	44,616	0.00	0.0		0.0	0.0	0.0	0.0
Bunker Creek (230218)	22,788	0.00	0.0		0.0	0.0	0.0	0.0
Curtis (230112)	43,351	0.00	0.0		0.0	0.0	0.0	0.0
Waddel Creek (230501)	28,982	0.00	0.0		0.0	0.0	0.0	0.0
Scatter Creek (230403)	31,680	0.00	0.0		0.0	0.0	0.0	0.0
<i>Planning Unit Average</i>		<i>0.05</i>	<i>3.4</i>		<i>0.2</i>	<i>0.0</i>	<i>2.0</i>	<i>1.2</i>
South Puget Planning Unit								
Cumberland (090202)	26,260	0.21	8.5		0.0	0.0	1.6	6.9
Tiger (080303)	40,881	0.19	11.9		0.0	0.0	10.7	1.2
Howard Hansen (090103)	46,472	0.04	3.2		0.4	0.0	2.1	0.7
Hood (150201)	145,611	0.00	0.0		0.0	0.0	0.0	0.0
Summit Lake (140002)	29,140	0.00	0.0		0.0	0.0	0.0	0.0
Squaxin (140003)	1,066	0.00	0.0		0.0	0.0	0.0	0.0
Olympia (130202)	18,529	0.00	0.0		0.0	0.0	0.0	0.0
Busy Wild (110204)	56,966	0.00	0.0		0.0	0.0	0.0	0.0
Reese Creek (110106)	5,036	0.00	0.0		0.0	0.0	0.0	0.0
North Fork Mineral (110112)	16,072	0.00	0.0		0.0	0.0	0.0	0.0
Mineral Creek (110110)	23,047	0.00	0.0		0.0	0.0	0.0	0.0
Ashford (110104)	27,680	0.00	0.0		0.0	0.0	0.0	0.0
East Creek (110113)	14,429	0.00	0.0		0.0	0.0	0.0	0.0
Catt (110108)	13,279	0.00	0.0		0.0	0.0	0.0	0.0
North Fork Green (090104)	18,410	0.00	0.0		0.0	0.0	0.0	0.0
<i>Planning Unit Average</i>		<i>0.03</i>	<i>1.6</i>		<i>0.0</i>	<i>0.0</i>	<i>1.0</i>	<i>0.6</i>
Straits Planning Unit								
Dungeness Valley (180103)	43,200	0.39	26.6		3.3	6.9	15.6	0.8
Sutherland-Aldwell (180310)	35,109	0.17	9.1		0.0	0.6	6.6	2.0
Siebert McDonald (180202)	35,481	0.16	8.7		3.6	0.0	4.7	0.4
Bell Creek (180104)	5,969	0.06	0.6		0.0	0.0	0.6	0.0
Hamma Hamma (160203)	69,941	0.05	5.6		0.4	5.2	0.0	0.0
Big Quil (170108)	51,823	0.01	0.6		0.0	0.0	0.6	0.0
Chimakum (170203)	28,202	0.00	0.0		0.0	0.0	0.0	0.0
Dabob (170106)	16,871	0.00	0.0		0.0	0.0	0.0	0.0
Ludlow (170104)	22,897	0.00	0.0		0.0	0.0	0.0	0.0
Discovery Bay (170202)	58,871	0.00	0.0		0.0	0.0	0.0	0.0
Lyre (190107)	11,021	0.00	0.0		0.0	0.0	0.0	0.0
Twins (190206)	20,351	0.00	0.0		0.0	0.0	0.0	0.0
Salt (190108)	26,336	0.00	0.0		0.0	0.0	0.0	0.0
Little Quil (170107)	28,536	0.00	0.0		0.0	0.0	0.0	0.0
Thorndike (170105)	16,587	0.00	0.0		0.0	0.0	0.0	0.0
Sequim Bay (170201)	26,752	0.00	0.0		0.0	0.0	0.0	0.0
Port Angeles (180211)	24,883	0.00	0.0		0.0	0.0	0.0	0.0
Lilliwaup (160204)	29,080	0.00	0.0		0.0	0.0	0.0	0.0
<i>Planning Unit Average</i>		<i>0.05</i>	<i>2.8</i>		<i>0.4</i>	<i>0.7</i>	<i>1.6</i>	<i>0.2</i>

1/ Includes privately owned industrial and non-industrial (i.e., small landowner) lands.

2/ Includes municipal, tribal, non-DNR State lands, and other lands.

Table E-13. Percent of Watershed Area in Each Land Use Category

Watershed Name (and number)	Total Acres	Percent of Watershed Area				
		Forested	Agricultural	Urban	Water and Wetland	Other ^{1/}
Columbia Planning Unit						
Lacamas (280202)	41,185	50%	31%	15%	2%	1%
Olequa (260626)	35,017	63%	32%	5%	0%	0%
Harmony (260330)	22,546	56%	32%	3%	9%	0%
Woodland (270412)	37,827	61%	25%	7%	6%	1%
Little Washougal (280203)	30,269	74%	14%	8%	3%	2%
Mill Creek (260429)	26,163	78%	18%	2%	1%	1%
Salmon Creek (260421)	43,837	84%	14%	1%	1%	1%
Main Elochoman (250208)	37,009	73%	13%	2%	12%	1%
Cedar Creek (270416)	36,416	85%	12%	3%	0%	0%
Delameter (260623)	37,243	90%	6%	3%	1%	0%
Lower Kalama (270113)	49,823	88%	2%	5%	3%	1%
Skamokawa (250209)	51,687	85%	6%	0%	6%	1%
Grays Bay (250310)	56,613	78%	5%	0%	16%	1%
Stillwater (260625)	28,905	95%	4%	1%	0%	0%
Rock Creek Clark (270508)	35,440	97%	2%	1%	0%	0%
Wind River (290414)	30,669	95%	2%	1%	1%	1%
Cedar Creek (260428)	14,441	97%	2%	0%	0%	0%
Silverstar (280204)	32,719	98%	2%	0%	0%	0%
Winston (260320)	28,321	99%	1%	1%	0%	0%
Lake Merwin (270415)	46,439	87%	1%	1%	11%	1%
Abernethy (250104)	40,071	97%	0%	1%	2%	1%
Rock Creek (290415)	41,733	94%	0%	1%	5%	0%
Bremer (260331)	19,894	97%	1%	0%	1%	1%
South Fork Toutle (260513)	42,623	97%	0%	0%	1%	1%
North Fork Toutle (260514)	41,051	93%	0%	0%	4%	3%
North Elochoman (250203)	23,518	99%	0%	0%	0%	1%
Cold Creek (270509)	21,281	89%	0%	0%	0%	11%
South Fork Grays River (250302)	16,774	97%	0%	0%	1%	3%
Cougar (270317)	32,888	91%	0%	0%	7%	2%
Green River (260515)	46,383	99%	0%	0%	0%	0%
West Fork Grays River (250311)	10,347	98%	0%	0%	0%	1%
Middle Kalama (270114)	51,534	99%	0%	0%	0%	1%
Hamilton Creek (280106)	32,845	95%	0%	0%	5%	0%
Spirit Lake (260507)	52,151	67%	0%	0%	6%	27%
Upper Washougal (280205)	31,719	100%	0%	0%	0%	0%
Upper SF Toutle (260508)	40,031	95%	0%	0%	1%	4%
Swift Creek (270304)	74,150	89%	0%	0%	6%	5%
Siouxon (270305)	39,066	99%	0%	0%	1%	0%
Planning Unit Average		88%	6%	2%	3%	2%
North Puget Planning Unit						
Sumas River (010125)	36,444	38%	57%	5%	0%	0%
Samish River (030301)	57,397	59%	35%	5%	0%	1%
Hansen Creek (030102)	29,010	72%	20%	5%	1%	1%
Samish Bay (010414)	13,258	78%	18%	2%	0%	1%
Acme (010311)	23,518	80%	18%	0%	1%	1%
Ebey Hill (050214)	19,812	80%	17%	2%	1%	1%
Nookachamps (030107)	47,730	80%	13%	4%	3%	1%
Lummi Island (010617)	5,063	81%	11%	6%	1%	2%
Cherry (070420)	38,183	83%	7%	9%	1%	0%

Table E-13. Percent of Watershed Area in Each Land Use Category

Watershed Name (and number)	Total Acres	Percent of Watershed Area				
		Forested	Agricultural	Urban	Water and Wetland	Other ^{1/}
Vedder (010131)	21,272	84%	16%	0%	0%	0%
Tate (070409)	9,798	79%	3%	13%	2%	3%
Jordan (050108)	21,252	82%	8%	7%	3%	1%
Woods Creek (070223)	42,463	84%	10%	5%	2%	1%
Deming (010226)	27,527	86%	11%	0%	1%	2%
Lower Pilchuck Creek (050313)	19,364	88%	8%	3%	0%	0%
Alder (030103)	22,865	89%	11%	0%	0%	0%
Friday Creek (030313)	24,129	85%	5%	5%	4%	1%
Olney Creek (070225)	20,655	90%	4%	3%	1%	2%
Stimson Hill (050215)	18,833	93%	6%	0%	0%	1%
Lake Whatcom (010412)	35,957	80%	1%	5%	14%	0%
Raging River (070408)	22,853	93%	0%	5%	1%	1%
Gilligan (030106)	18,879	91%	5%	0%	3%	2%
Youngs Creek (070219)	23,776	92%	3%	1%	1%	2%
South Snoqualmie (070306)	57,077	94%	0%	4%	1%	1%
Grandy (040534)	18,856	94%	4%	0%	1%	0%
Sauk Prairie (040320)	14,137	95%	4%	0%	1%	1%
Sultan River (070224)	24,388	93%	1%	3%	3%	1%
Jim Creek (050109)	30,690	96%	3%	1%	0%	0%
Hutchinson Creek (010310)	13,975	97%	2%	0%	1%	0%
Corkindale (040531)	24,194	96%	2%	0%	2%	0%
Lower MF Snoqualmie (070307)	28,375	95%	0%	2%	1%	2%
Wallace River (070217)	24,667	94%	0%	2%	2%	2%
Kenney Creek (010230)	2,791	94%	2%	0%	2%	2%
Pilchuck Mtn (070226)	42,517	95%	0%	2%	1%	3%
Loretta (030104)	15,769	95%	1%	0%	3%	1%
Hazel (050203)	24,179	98%	1%	0%	0%	0%
Rinker (040321)	20,481	95%	1%	0%	2%	2%
French Boulder (050204)	45,327	94%	1%	0%	0%	5%
Tolt (070415)	63,357	96%	0%	0%	2%	2%
Jackman (040529)	16,399	99%	0%	0%	0%	0%
Warnick (010229)	25,436	98%	0%	0%	1%	1%
Jordan-Boulder (040224)	32,726	97%	0%	0%	1%	2%
Cypress (030415)	4,950	97%	0%	0%	1%	2%
North Fork Snoqualmie (070313)	66,707	97%	0%	0%	2%	2%
Deer Creek (050201)	41,881	99%	0%	0%	0%	0%
Verlot (050107)	23,540	93%	0%	0%	1%	6%
Silverton (050106)	46,399	94%	0%	0%	0%	5%
Spada (070216)	44,197	92%	0%	0%	4%	4%
Cavanaugh (050316)	29,722	97%	0%	0%	3%	0%
Day Creek (030105)	22,203	99%	0%	0%	1%	0%
Skookum Creek (010309)	23,905	99%	0%	0%	0%	1%
Porter Canyon (010327)	18,550	98%	0%	0%	1%	1%
Howard Creek (010308)	39,040	99%	0%	0%	0%	0%
Canyon Creek (010232)	36,807	98%	0%	0%	1%	1%
Clearwater Creek (010328)	14,330	100%	0%	0%	0%	0%
West Shannon (040435)	14,333	94%	0%	0%	6%	0%
Marmot Ridge (010306)	31,794	84%	0%	0%	0%	16%
Hilt (040322)	12,453	98%	0%	0%	1%	2%
Upper NF Stilly (050202)	32,833	100%	0%	0%	0%	0%
East Shannon (040436)	34,065	91%	0%	0%	9%	1%

Table E-13. Percent of Watershed Area in Each Land Use Category

Watershed Name (and number)	Total Acres	Percent of Watershed Area				
		Forested	Agricultural	Urban	Water and Wetland	Other ^{1/}
Tenas (040319)	36,688	97%	0%	0%	1%	2%
<i>Planning Unit Average</i>		<i>90%</i>	<i>5%</i>	<i>2%</i>	<i>2%</i>	<i>2%</i>
Olympic Experimental State Forest						
Sol Duc Valley (200316)	16,585	87%	8%	4%	1%	0%
Sol Duc Lowlands (200416)	22,368	94%	4%	0%	1%	1%
Sol Duc Valley (200201)	47,220	95%	3%	0%	1%	0%
Clallam River (190303)	22,235	96%	3%	0%	0%	0%
Quillayute Bottom (200417)	23,180	94%	3%	0%	1%	1%
Hoko (190302)	44,534	99%	1%	0%	0%	0%
Middle Hoh (200607)	46,272	97%	0%	0%	1%	2%
Queets Corridor North (210213)	39,496	94%	0%	1%	2%	3%
Hoh Lowlands (200608)	30,244	95%	0%	0%	2%	3%
Sekiu Coastal (190301)	27,412	100%	0%	0%	0%	0%
Matheney-Salmon (210211)	21,630	99%	0%	0%	0%	1%
Bogachiel (200412)	44,993	98%	0%	0%	1%	1%
Cedar (200609)	12,310	99%	0%	0%	0%	0%
Lower Clearwater (210114)	45,246	99%	0%	0%	1%	1%
Queets Corridor South (210212)	29,667	99%	0%	0%	0%	1%
Upper Clearwater (210116)	58,265	100%	0%	0%	0%	0%
Pysht River (190204)	32,972	99%	0%	0%	0%	1%
West Dickey (200419)	28,311	98%	0%	0%	2%	0%
East Dickey (200418)	26,657	100%	0%	0%	0%	0%
Ozette Lake (200120)	35,130	99%	0%	0%	0%	0%
Goodman-Mosquito (200610)	33,529	100%	0%	0%	0%	0%
Kalaloch Ridge (210115)	11,472	99%	0%	0%	0%	1%
Rain Forest (200505)	56,435	93%	0%	0%	1%	6%
<i>Planning Unit Average</i>		<i>97%</i>	<i>1%</i>	<i>0%</i>	<i>1%</i>	<i>1%</i>
South Coast Planning Unit						
Scatter Creek (230403)	31,680	50%	41%	9%	0%	0%
Lower Willapa (240315)	32,329	71%	19%	4%	4%	1%
Lower Skookumchuck (230404)	44,616	76%	17%	6%	1%	1%
Mox Chehalis (220106)	23,315	81%	15%	4%	1%	0%
Lincoln Creek (230219)	48,086	84%	14%	1%	0%	0%
Garrard Creek (230220)	49,056	85%	13%	0%	1%	1%
Curtis (230112)	43,351	86%	12%	1%	0%	1%
Waddel Creek (230501)	28,982	88%	10%	1%	0%	0%
Rock-Jones (230116)	22,917	87%	9%	2%	0%	1%
Cedar Creek (230521)	32,505	91%	6%	2%	0%	1%
Elk River (220625)	32,340	91%	2%	6%	0%	1%
Bunker Creek (230218)	22,788	93%	7%	1%	0%	0%
Willapa Headwaters (240306)	62,581	93%	5%	0%	0%	1%
Lower Naselle (240108)	36,688	94%	2%	1%	1%	2%
Porter Creek (230522)	32,023	97%	2%	0%	0%	1%
Palix (240213)	35,825	96%	1%	1%	1%	1%
South Fork Willapa (240314)	26,664	96%	0%	2%	1%	1%
North River Headwaters (240402)	34,532	97%	2%	0%	0%	1%
Copalis River (210407)	40,529	96%	0%	1%	0%	2%
Elk Creek (230117)	38,773	98%	1%	0%	0%	1%
Nemah (240212)	40,522	98%	0%	0%	0%	1%
Naselle Headwaters (240107)	48,336	98%	0%	0%	0%	1%

Table E-13. Percent of Watershed Area in Each Land Use Category

Watershed Name (and number)	Total Acres	Percent of Watershed Area				
		Forested	Agricultural	Urban	Water and Wetland	Other ^{1/}
Joe-Moclips (210408)	50,805	98%	0%	0%	0%	1%
Mill Creek (240305)	15,699	99%	0%	0%	0%	1%
<i>Planning Unit Average</i>		<i>89%</i>	<i>7%</i>	<i>2%</i>	<i>0%</i>	<i>1%</i>
South Puget Planning Unit						
Olympia (130202)	18,529	80%	3%	16%	1%	0%
Tiger (080303)	40,881	81%	4%	12%	1%	2%
Hood (150201)	145,611	89%	1%	8%	1%	1%
Summit Lake (140002)	29,140	90%	2%	5%	2%	1%
Cumberland (090202)	26,260	93%	1%	5%	1%	0%
Busy Wild (110204)	56,966	97%	1%	1%	0%	0%
Ashford (110104)	27,680	91%	1%	1%	7%	0%
East Creek (110113)	14,429	94%	0%	0%	6%	0%
Howard Hansen (090103)	46,472	98%	0%	0%	1%	0%
North Fork Green (090104)	18,410	100%	0%	0%	0%	0%
Squaxin (140003)	1,066	98%	0%	0%	2%	0%
Reese Creek (110106)	5,036	99%	0%	0%	1%	0%
North Fork Mineral (110112)	16,072	100%	0%	0%	0%	0%
Mineral Creek (110110)	23,047	99%	0%	0%	1%	0%
Catt (110108)	13,279	100%	0%	0%	0%	0%
<i>Planning Unit Average</i>		<i>94%</i>	<i>1%</i>	<i>3%</i>	<i>2%</i>	<i>0%</i>
Straits Planning Unit						
Bell Creek (180104)	5,969	37%	55%	8%	0%	0%
Dungeness Valley (180103)	43,200	63%	33%	2%	0%	1%
Port Angeles (180211)	24,883	66%	7%	25%	0%	1%
Chimakum (170203)	28,202	80%	13%	5%	1%	2%
Siebert McDonald (180202)	35,481	84%	13%	2%	0%	0%
Salt (190108)	26,336	87%	10%	3%	0%	0%
Sequim Bay (170201)	26,752	91%	7%	1%	0%	1%
Discovery Bay (170202)	58,871	92%	1%	6%	1%	1%
Ludlow (170104)	22,897	94%	2%	3%	0%	1%
Little Quil (170107)	28,536	95%	3%	0%	1%	0%
Sutherland-Aldwell (180310)	35,109	91%	2%	1%	2%	4%
Lyre (190107)	11,021	98%	1%	1%	0%	0%
Lilliwaup (160204)	29,080	98%	0%	1%	0%	1%
Big Quil (170108)	51,823	91%	0%	0%	0%	8%
Twins (190206)	20,351	100%	0%	0%	0%	0%
Hamma Hamma (160203)	69,941	91%	0%	0%	0%	9%
Dabob (170106)	16,871	99%	0%	0%	1%	1%
Thorndike (170105)	16,587	99%	0%	0%	1%	1%
<i>Planning Unit Average</i>		<i>86%</i>	<i>8%</i>	<i>3%</i>	<i>0%</i>	<i>2%</i>

1/ Includes areas that are barren, data noise, snow, and other areas.

Table E-14. Percent of Watershed Area Classified by DNR as Hydrologically Immature Forest in the Rain-on-Snow Zone^{1/}

Watershed Name (and number)	Total Acres	Percent Classified as "Young" in the Rain- on-Snow Zone	Percentage Breakdown by Ownership			
			DNR	Federal	Private ^{3/}	Other ^{4/}
Columbia Planning Unit						
Green River (260515)	46,383	49	1	0	46	2
North Fork (260514)	41,051	48	18	0	28	2
South Fork Grays River (250302)	16,774	47	2	0	45	0
Swift Creek (270304)	74,150	44	1	15	27	0
Wind River (290414)	30,669	37	1	35	0	0
Upper South Fork (260508)	40,031	33	11	1	20	1
Siouxon (270305)	39,066	32	4	28	0	0
North Elochoman (250203)	23,518	31	0	0	30	0
Winston (260320)	28,321	29	4	0	22	3
South Fork (260513)	42,623	28	10	0	19	0
Middle Kalama (270114)	51,534	28	2	0	26	0
Main Fork (250311)	10,347	28	1	0	27	0
Silverstar (280204)	32,719	27	4	7	16	1
Hamilton Creek (280106)	32,845	27	7	8	7	5
Rock Creek Clark (270508)	35,440	26	1	13	12	0
Upper Washougal (280205)	31,719	26	6	8	12	1
Bremer (260331)	19,894	25	1	5	19	0
Spirit Lake (260507)	52,151	23	2	21	0	0
Rock Creek (290415)	41,733	20	4	12	4	0
Cougar (270317)	32,888	20	2	14	4	0
Lake Merwin (270415)	46,439	14	4	0	10	0
Headwaters (240107)	48,336	14	0	0	14	0
Cold Creek (270509)	21,281	11	7	1	3	0
Delameter (260623)	37,243	7	0	0	7	0
Skamokawa (250209)	51,687	6	0	0	5	0
Abernethy (250104)	40,071	5	2	0	3	0
Cedar Creek (270416)	36,416	4	0	0	4	0
Mill Creek (260429)	26,163	4	0	0	4	0
Catt (110108)	13,279	3	2	1	0	0
Stillwater (260625)	28,905	3	0	0	3	0
Lower Kalama (270113)	49,823	2	1	0	2	0
Little Washougal (280203)	30,269	2	1	0	2	0
Harmony (260330)	22,546	2	0	0	2	0
Main Elochoman (250208)	37,009	2	0	0	2	0
Lacamas (280202)	41,185	2	1	0	1	0
Woodland (270412)	37,827	1	1	0	0	0
Salmon Creek (260421)	43,837	1	0	0	0	0
Grays Bay (250310)	56,613	0	0	0	0	0
Planning Unit Average		19	3	4	11	0
North Puget Planning Unit						
Day Creek (030105)	22,203	42	1	3	38	0
Spada (070216)	44,197	33	25	4	0	4
Howard Creek (010308)	39,040	27	2	1	22	2
Upper Nf Stilly (050202)	32,833	27	0	24	3	0
Tolt (070415)	63,357	25	0	2	19	4
Silverton (050106)	46,399	24	0	24	0	0

Table E-14. Percent of Watershed Area Classified by DNR as Hydrologically Immature Forest in the Rain-on-Snow Zone^{1/}

Watershed Name (and number)	Total Acres	Percent Classified as "Young" in the Rain- on-Snow Zone	Percentage Breakdown by Ownership			
			DNR	Federal	Private ^{3/}	Other ^{4/}
Verlot (050107)	23,540	24	2	21	0	0
North Fork Snoqualmie (070313)	66,707	23	1	10	11	1
Deer Creek (050201)	41,881	23	1	11	11	0
Wallace River (070217)	24,667	22	10	6	4	3
Acme (010311)	23,518	22	7	0	16	0
Raging River (070408)	22,853	19	1	0	17	1
Hutchinson Creek (010310)	13,975	19	1	0	17	0
Sauk Prairie (040320)	14,137	19	5	6	8	0
South Snoqualmie (070306)	57,077	19	2	12	3	2
Jim Creek (050109)	30,690	18	1	5	11	1
Deming (010226)	27,527	18	7	0	11	0
Kenney Creek (010230)	2,791	18	0	0	18	0
French Boulder (050204)	45,327	17	0	16	1	0
Youngs Creek (070219)	23,776	17	0	0	17	0
Loretta (030104)	15,769	17	1	1	15	0
Corkindale (040531)	24,194	16	2	12	2	0
Jackman (040529)	16,399	16	1	2	13	0
Lower Middle (070307)	28,375	16	8	8	0	0
Rinker (040321)	20,481	15	2	5	8	0
E Shannon (040436)	34,065	15	0	7	7	0
Porter Canyon (010327)	18,550	14	2	0	12	1
Tenas (040319)	36,688	14	0	12	2	0
Canyon Creek (010232)	36,807	14	2	4	8	0
Hilt (040322)	12,453	13	0	10	3	0
Hazel (050203)	24,179	13	2	10	1	0
Jordan-Boulder (040224)	32,726	13	1	3	9	0
Skookum Creek (010309)	23,905	11	0	0	11	0
Olney Creek (070225)	20,655	11	6	0	3	2
Hansen Creek (030102)	29,010	10	1	0	9	0
Warnick (010229)	25,436	10	4	0	6	0
Gilligan (030106)	18,879	10	1	0	9	0
Pilchuck Mtn (070226)	42,517	9	7	0	2	0
W Shannon (040435)	14,333	9	0	1	8	0
Cavanaugh (050316)	29,722	9	1	0	8	0
Samish River (030301)	57,397	7	2	0	5	0
Grandy (040534)	18,856	6	1	0	5	0
Marmot Ridge (010306)	31,794	6	1	2	3	0
Vedder (010131)	21,272	5	3	0	3	0
Lake Whatcom (010412)	35,957	5	3	0	2	0
Stimson Hill (050215)	18,833	4	2	0	2	0
Sumas River (010125)	36,444	4	1	0	3	0
Nookachamps (030107)	47,730	3	0	0	3	0
Ebey Hill (050214)	19,812	3	0	0	3	0
Sultan River (070224)	24,388	3	1	1	0	0
Tate (070409)	9,798	2	1	0	2	0
Jordan (050108)	21,252	2	1	1	1	0
Alder (030103)	22,865	2	2	0	0	0

Table E-14. Percent of Watershed Area Classified by DNR as Hydrologically Immature Forest in the Rain-on-Snow Zone^{1/}

Watershed Name (and number)	Total Acres	Percent Classified as "Young" in the Rain- on-Snow Zone	Percentage Breakdown by Ownership			
			DNR	Federal	Private ^{3/}	Other ^{4/}
Friday Creek (030313)	24,129	2	0	0	1	0
Clearwater Creek (010328)	14,330	1	1	0	0	0
Cherry (070420)	38,183	1	0	0	1	0
Samish Bay (010414)	13,258	0	0	0	0	0
Planning Unit Average		14	2	4	7	0
Olympic Experimental State Forest						
Queets Corridor S (210212)	29,667	46	0	46	0	0
Rain Forest (200505)	56,435	39	4	34	0	0
Matheney-Salmon (210211)	21,630	29	0	13	0	16
Middle Hoh (200607)	46,272	26	24	1	0	0
Upper Clearwater (210116)	58,265	24	23	1	0	0
Sol Duc Valley (200201)	47,220	15	0	13	1	0
Sol Duc Lowlands (200416)	22,368	6	0	5	1	0
Queets Corridor North (210213)	39,496	5	0	5	0	0
Sol Duc Valley (200316)	16,585	5	0	5	0	0
Hoko (190302)	44,534	4	1	1	2	0
Kalaloch Ridge (210115)	11,472	3	3	0	0	0
Bogachiel (200412)	44,993	3	0	3	0	0
Pysht River (190204)	32,972	3	0	2	0	0
Clallam River (190303)	22,235	2	0	0	2	0
Lower Clearwater (210114)	45,246	2	0	0	2	0
East Dickey (200418)	26,657	2	0	0	2	0
Hoh Lowlands (200608)	30,244	1	0	0	1	0
Sekiu Coastal (190301)	27,412	1	0	0	0	1
West Dickey (200419)	28,311	0	0	0	0	0
Cedar (200609)	12,310	0	0	0	0	0
Planning Unit Average		11	3	7	1	1
South Coast Planning Unit						
Headwaters (240107)	48,336	14	0	0	14	0
Headwaters (240306)	62,581	10	0	0	10	0
Elk Creek (230117)	38,773	3	0	0	2	0
Cedar Creek (230521)	32,505	3	3	0	0	0
Rock-Jones (230116)	22,917	2	1	0	1	0
Porter Creek (230522)	32,023	2	2	0	0	0
Garrard Creek (230220)	49,056	2	0	0	2	0
Lincoln Creek (230219)	48,086	2	0	0	2	0
Lower Naselle (240108)	36,688	2	0	0	1	0
Nemah (240212)	40,522	2	0	0	1	0
Headwaters (240402)	34,532	1	0	0	1	0
South Fork Willapa (240314)	26,664	1	0	0	1	0
Lower Skookumchuck (230404)	44,616	1	0	0	1	0
Waddel Creek (230501)	28,982	0	0	0	0	0
Curtis (230112)	43,351	0	0	0	0	0
Mill Creek (240305)	15,699	0	0	0	0	0
Mox Chehalis (220106)	23,315	0	0	0	0	0
Planning Unit Average		2	0	0	2	0

Table E-14. Percent of Watershed Area Classified by DNR as Hydrologically Immature Forest in the Rain-on-Snow Zone^{1/}

Watershed Name (and number)	Total Acres	Percent Classified as	Percentage Breakdown by Ownership			
		"Young" in the Rain- on-Snow Zone	DNR	Federal	Private ^{3/}	Other ^{4/}
South Puget Planning Unit						
Howard Hansen (090103)	46,472	31	7	0	24	1
North Fork Green (090104)	18,410	27	3	0	22	2
Mineral Creek (110110)	23,047	26	3	0	18	4
East Creek (110113)	14,429	23	2	10	10	1
Busy Wild (110204)	56,966	21	4	0	17	0
Ashford (110104)	27,680	18	5	4	5	3
Cumberland (090202)	26,260	13	1	0	11	0
Reese Creek (110106)	5,036	11	11	0	0	0
North Fork Mineral (110112)	16,072	8	2	0	5	1
Tiger (080303)	40,881	4	2	0	2	1
Catt (110108)	13,279	3	2	1	0	0
Summit Lake (140002)	29,140	0	0	0	0	0
Olympia (130202)	18,529	0	0	0	0	0
Planning Unit Average		14	3	1	9	1
Straits Planning Unit						
Hamma Hamma (160203)	69,941	46	1	44	0	0
Big Quil (170108)	51,823	39	0	39	0	0
Sutherland-Aldwell (180310)	35,109	27	1	25	1	0
Twins (190206)	20,351	26	0	25	1	0
Little Quil (170107)	28,536	19	0	19	0	0
Sequim Bay (170201)	26,752	15	4	9	2	0
Dungeness Valley (180103)	43,200	13	1	11	1	0
Siebert Mcdonald (180202)	35,481	12	0	12	0	0
Lyre (190107)	11,021	12	0	9	3	0
Discovery Bay (170202)	58,871	9	0	8	1	0
Lilliwaup (160204)	29,080	8	0	8	0	0
Port Angeles (180211)	24,883	7	1	6	1	0
Salt (190108)	26,336	2	2	0	0	0
Bell Creek (180104)	5,969	1	0	0	0	0
Planning Unit Average		17	1	15	1	0

1/ Identified by DNR as "young", as opposed to "mature." Hydrologically mature is defined as a well-stocked conifer stand over the age of 25 years, with a relative density of at least 25.

2/ Watershed Analysis Units with greater than 5% ownership that have hydrologically immature forested land in the rain-on-snow zone are ranked by percent area of unit that meets these criteria.

3/ Includes privately owned industrial and non-industrial (i.e., small landowner) forest land

4/ Includes, municipal, tribal, non-DNR state lands, and other lands

Table E-15. Lengths of Streams in Each Watershed that Have 303(d) Listings for Temperature ^{1/}

Watershed Name (and Number)	Total Acres	Elevation of Watershed (feet)	Miles of 303(d) listed Stream	Rank ^{2/}	Miles Breakdown by Ownership			
					DNR	Federal	Private ^{3/}	Other ^{4/}
Columbia Planning Unit								
Lacamas (280202)	41,185	525	5.44	4		0.57	4.67	0.20
Lower Kalama (270113)	49,823	855	1.89	27			1.89	0.00
Green River (260515)	46,383	1,851	1.33	37			1.33	0.00
Abernethy (250104)	40,071	877	1.14	40	1.14		0.00	0.00
Upper SF Toutle (260508)	40,031	2,948	0.98	49	0.98		0.00	0.00
Main Elochoman (250208)	37,009	440	0.91	53	0.04		0.53	0.33
Planning Unit Total			11.69		2.17	0.57	8.42	0.53
North Puget Planning Unit								
Nookachamps (030107)	47,730	810	8.62	2	0.01		8.61	0.00
Hansen Creek (030102)	29,010	933	4.40	8			3.78	0.63
Canyon Creek (010232)	36,807	2,982	2.62	17	0.47		2.15	0.00
South Snoqualmie (070306)	57,077	2,617	2.61	18			2.61	0.00
Deer Creek (050201)	41,881	2,576	2.55	20			2.55	0.00
Howard Creek (010308)	39,040	2,393	2.50	22			2.21	0.28
Raging River (070408)	22,853	1,387	2.49	23			2.49	0.00
Tate (070409)	9,798	704	2.25	24			2.25	0.00
Warnick (010229)	25,436	2,406	1.97	26	0.02	0.17	1.77	0.00
Porter Canyon (010327)	18,550	1,983	1.64	30	0.63		0.98	0.03
Jordan (050108)	21,252	398	1.59	32			1.52	0.07
Day Creek (030105)	22,203	2,135	1.34	36			1.34	0.00
Jackman (040529)	16,399	2,854	1.16	39			1.16	0.00
Lower Pilchuck Creek (050313)	19,364	399	1.14	41			1.14	0.00
Grandy (040534)	18,856	1,351	1.12	42			1.12	0.00
Skookum Creek (010309)	23,905	2,785	1.08	44	0.90		0.18	0.00
Loretta (030104)	15,769	2,349	0.99	48			0.99	0.00
French Boulder (050204)	45,327	2,333	0.97	51	0.61		0.34	0.02
Alder (030103)	22,865	858	0.91	52			0.91	0.00
Wallace River (070217)	24,667	2,165	0.70	56			0.70	0.00
Sumas River (010125)	36,444	408	0.59	58	0.01		0.58	0.00
Acme (010311)	23,518	1,035	0.52	59			0.52	0.00
Ebey Hill (050214)	19,812	796	0.26	60	0.26		0.00	0.00
Planning Unit Total			3.95		2.91	0.17	39.90	1.02

Table E-15. Lengths of Streams in Each Watershed that Have 303(d) Listings for Temperature ^{1/}

Watershed Name (and Number)	Total Acres	Elevation of Watershed (feet)	Miles of 303(d) listed Stream	Rank ^{2/}	Miles Breakdown by Ownership			
					DNR	Federal	Private ^{3/}	Other ^{4/}
Olympic Experimental State Forest								
Bogachiel (200412)	44,993	395	9.57	1	0.58	0.34	7.64	1.01
Middle Hoh (200607)	46,272	1,047	5.59	3	2.58		2.96	0.06
Sol Duc Lowlands (200416)	22,368	448	5.12	5	0.04		5.08	0.00
West Dickey (200419)	28,311	381	4.58	7	0.03		4.55	0.00
Rain Forest (200505)	56,435	2,934	3.81	10	2.13		0.00	1.69
Sekiu Coastal (190301)	27,412	271	3.70	11	0.00		3.66	0.03
Sol Duc Valley (200201)	47,220	949	3.38	12			3.02	0.35
East Dickey (200418)	26,657	504	2.74	16	0.41		2.23	0.10
Clallam River (190303)	22,235	228	2.52	21	1.18		1.20	0.14
Kalaloch Ridge (210115)	11,472	217	1.82	28		0.44	1.38	0.00
Hoh Lowlands (200608)	30,244	331	1.72	29			1.72	0.00
Quillayute Bottom (200417)	23,180	114	1.49	33	0.23		1.25	0.01
Ozette Lake (200120)	35,130	300	1.48	34	0.00		1.48	0.00
Pysht River (190204)	32,972	343	1.06	46			1.06	0.00
Sol Duc Valley (200316)	16,585	503	0.82	55			0.82	0.00
Hoko (190302)	44,534	555	0.12	63			0.01	0.11
Planning Unit Total			6.70		7.19	0.79	38.05	3.50
South Coast								
Garrard Creek (230220)	49,056	461	3.94	9			3.22	0.72
Lower Skookumchuck (230404)	44,616	494	2.59	19			2.59	0.00
Curtis (230112)	43,351	561	1.62	31			1.62	0.00
Scatter Creek (230403)	31,680	309	1.10	43			1.10	0.00
Lincoln Creek (230219)	48,086	439	1.05	47			1.05	0.00
Naselle Headwaters (240107)	48,336	806	0.97	50			0.97	0.00
Willapa Headwaters (240306)	62,581	785	0.87	54			0.87	0.00
Cedar Creek (230521)	32,505	839	0.60	57			0.27	0.33
Porter Creek (230522)	32,023	1,014	0.24	61			0.21	0.03
Lower Willapa (240315)	32,329	191	0.20	62			0.20	0.00
Planning Unit Total			3.94		0.00	0.00	12.12	1.08

Table E-15. Lengths of Streams in Each Watershed that Have 303(d) Listings for Temperature ^{1/}

Watershed Name (and Number)	Total Acres	Elevation of Watershed (feet)	Miles of 303(d) listed Stream	Rank ^{2/}	Miles Breakdown by Ownership			
					DNR	Federal	Private ^{3/}	Other ^{4/}
South Puget								
Hood (150201)	145,611	366	4.95	6	0.69		3.02	1.25
Howard Hansen (090103)	46,472	2,303	2.81	15	0.03		0.00	2.78
Catt (110108)	13,279	3,375	1.40	35		1.40	0.00	0.00
Planning Unit Total			13.30		0.72	1.40	3.02	4.03
Straits								
Chimakum (170203)	28,202	168	3.15	13			3.15	0.00
Little Quil (170107)	28,536	1,215	3.12	14			3.12	0.00
Dabob (170106)	16,871	239	2.06	25			1.47	0.59
Sutherland-Aldwell (180310)	35,109	1,528	1.27	38			0.79	0.47
Port Angeles (180211)	24,883	425	1.06	45			1.06	0.00
Planning Unit Total			10.67		0.00	0.00	9.61	1.06

1/ Includes all streams in watershed with DNR ownership of >5%, listed for temperature

2/ Watersheds are ranked by miles of stream listed for temperature

3/ Includes privately owned industrial and non-industrial (i.e., small landowner) forest land

4/ Includes, municipal, tribal, non-DNR state lands, and other lands

Table E-16 Lengths of Streams in Each Watershed that Have 303(d) Listings for Dissolved Oxygen ^{1/}

Watershed Name (and Number)	Total Acres	Elevation of Watershed (feet)	Miles of 303(d) listed Stream	Miles Breakdown by Ownership			
				DNR	Federal	Private ^{2/}	Other ^{3/}
Columbia Planning Unit							
Lacamas (280202)	41,185	525	8.57		0.57	7.80	0.20
Planning Unit Total			8.57	0.00	0.57	7.80	0.20
North Puget Planning Unit							
Sumas River (010125)	36,444	408	17.17			17.04	0.14
Jordan (050108)	21,252	398	1.16			1.16	0.00
Lower Pilchuck Creek (050313)	19,364	399	1.14			1.14	0.00
Woods Creek (070223)	42,463	503	0.04			0.04	0.00
Planning Unit Total			19.51	0.00	0.00	19.37	0.14
Olympic Experimental State Forest							
Bogachiel (200412)	44,993	395	2.86		0.34	2.16	0.35
Sol Duc Lowlands (200416)	22,368	448	2.78	0.04		2.73	0.00
Sol Duc Valley (200201)	47,220	949	1.37			1.37	0.00
Planning Unit Total			7.01	0.04	0.34	6.27	0.35
South Coast Planning Unit							
Joe-Moclips (210408)	50,805	152	2.27			2.14	0.13
Lower Willapa (240315)	32,329	191	1.22			1.22	0.00
Planning Unit Total			3.49	0.00	0.00	3.36	0.13

1/ Includes all streams in watershed with DNR ownership of >5%, listed for dissolved oxygen

2/ Includes privately owned industrial and non-industrial (i.e., small landowner) forest land

3/ Includes, municipal, tribal, non-DNR state lands, and other lands

Table E-17. Lengths of Streams in Each Watershed that Have 303(d) Listings for Fine Sediment ^{1/}

Watershed Name (and Number)	Total Acres	Average Elevation of Watershed	Miles of 303(d) listed Stream	Miles Breakdown by Ownership		
		(feet)		DNR	Private ^{2/}	Other ^{3/}
North Puget Planning Unit						
Howard Creek (010308)	39,040	2,393	1.73		1.44	0.28
Warnick (010229)	25,436	2,406	0.91	0.02	0.89	
<i>Total</i>			<i>2.64</i>	<i>0.02</i>	<i>2.33</i>	<i>0.28</i>

1/ Includes all streams in watershed with DNR ownership of >5%, listed for fine sediment

2/ Includes privately owned industrial and non-industrial (i.e., small landowner) forest land

3/ Includes, municipal, tribal, non-DNR state lands, and other lands

Table E-18. Percent of Watershed Classified as High for Potential Slope Instability

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent of Watershed Acreage Classified as High	Percentage Breakdown by Ownership			
				DNR	Federal	Private ^{2/}	Other ^{3/}
Columbia Planning Unit							
Bremer (260331)	19,894	9	30.7	3.3	5.0	21.6	0.8
Grays Bay (250310)	56,613	19	25.8	3.1	0.0	22.5	0.1
Stillwater (260625)	28,905	21	25.2	0.8	0.0	24.3	0.0
North Elochoman (250203)	23,518	28	23.6	4.4	0.0	19.1	0.0
West Fork Grays River (250311)	10,347	32	22.9	4.2	0.0	18.7	0.0
Skamokawa (250209)	51,687	72	12.8	2.9	0.0	9.6	0.3
Upper Washougal (280205)	31,719	80	12.1	8.1	1.9	1.9	0.1
South Fork Grays River (250302)	16,774	97	10.1	3.1	0.0	6.9	0.1
Mill Creek (260429)	26,163	98	9.6	1.8	0.0	7.8	0.0
Siouxon (270305)	39,066	102	9.2	2.8	6.4	0.0	0.0
Main Elochoman (250208)	37,009	113	8.4	2.5	0.0	5.9	0.0
Spirit Lake (260507)	52,151	114	8.1	1.1	6.9	0.1	0.0
Upper SF Toutle (260508)	40,031	122	7.0	1.8	2.1	3.0	0.2
Delameter (260623)	37,243	123	7.0	0.0	0.0	7.0	0.0
Rock Creek (290415)	41,733	124	6.9	4.1	1.4	1.4	0.1
Cougar (270317)	32,888	129	6.1	3.2	1.7	1.2	0.0
Cedar Creek (260428)	14,441	133	5.9	0.2	0.0	5.2	0.4
Wind River (290414)	30,669	134	5.6	1.5	3.5	0.5	0.1
Hamilton Creek (280106)	32,845	135	5.6	1.3	1.6	0.8	1.9
Olequa (260626)	35,017	138	5.0	2.0	0.0	3.0	0.0
Swift Creek (270304)	74,150	146	4.6	0.7	2.0	1.8	0.0
Silverstar (280204)	32,719	153	3.3	0.6	1.4	1.3	0.1
Lake Merwin (270415)	46,439	154	3.3	1.9	0.0	1.4	0.0
Harmony (260330)	22,546	155	3.1	0.1	0.0	2.7	0.4
Rock Creek Clark (270508)	35,440	156	3.1	0.3	2.5	0.3	0.1
Salmon Creek (260421)	43,837	160	2.7	0.0	0.0	2.6	0.1
Middle Kalama (270114)	51,534	161	2.7	0.2	0.0	2.4	0.0
Winston (260320)	28,321	162	2.6	0.7	0.0	2.0	0.0
Abernethy (250104)	40,071	165	2.1	1.3	0.0	0.8	0.0
North Fork Toutle (260514)	41,051	168	1.9	0.4	0.0	1.3	0.2
Woodland (270412)	37,827	169	1.3	0.7	0.0	0.6	0.0
Green River (260515)	46,383	170	1.3	0.0	0.0	1.1	0.1

Table E-18. Percent of Watershed Classified as High for Potential Slope Instability

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent of Watershed Acreage Classified as High	Percentage Breakdown by Ownership			
				DNR	Federal	Private ^{2/}	Other ^{3/}
Cold Creek (270509)	21,281	171	1.1	0.6	0.4	0.1	0.0
Cedar Creek (270416)	36,416	172	1.1	0.1	0.0	0.9	0.1
Lower Kalama (270113)	49,823	173	1.0	0.0	0.0	1.0	0.0
South Fork Toutle (260513)	42,623	174	1.0	0.6	0.0	0.4	0.0
Little Washougal (280203)	30,269	175	0.8	0.2	0.0	0.6	0.0
Lacamas (280202)	41,185	179	0.1	0.0	0.0	0.1	0.0
Planning Unit Average			7.5	1.6	1.0	4.8	0.1
North Puget Planning Unit							
South Snoqualmie (070306)	57,077	1	55.2	8.1	36.5	5.5	5.2
Spada (070216)	44,197	7	32.4	21.1	9.6	0.5	1.2
Silverton (050106)	46,399	8	30.9	2.2	28.2	0.5	0.1
Clearwater Creek (010328)	14,330	10	29.4	16.5	10.7	2.0	0.3
Marmot Ridge (010306)	31,794	11	28.4	3.3	23.2	1.9	0.0
North Fork Snoqualmie (070313)	66,707	12	28.2	2.5	16.1	8.9	0.6
Jordan-Boulder (040224)	32,726	13	27.7	8.0	12.4	7.3	0.1
French Boulder (050204)	45,327	14	27.3	1.5	24.7	1.0	0.1
Tenas (040319)	36,688	15	27.0	1.3	24.4	1.4	0.0
Raging River (070408)	22,853	16	26.7	10.5	0.0	15.7	0.5
Lower MF Snoqualmie (070307)	28,375	17	26.7	16.0	7.9	2.8	0.0
Jackman (040529)	16,399	23	24.6	1.6	13.9	9.1	0.0
Loretta (030104)	15,769	27	23.7	1.7	9.9	11.9	0.2
Deer Creek (050201)	41,881	29	23.5	3.6	13.9	6.0	0.0
Corkindale (040531)	24,194	30	23.4	1.8	17.6	3.4	0.5
East Shannon (040436)	34,065	31	23.0	1.9	16.0	5.1	0.0
Canyon Creek (010232)	36,807	33	22.9	2.9	13.0	6.9	0.0
Warnick (010229)	25,436	34	22.5	16.6	0.5	5.4	0.0
Porter Canyon (010327)	18,550	35	22.1	6.8	0.0	12.1	3.2
Upper NF Stilly (050202)	32,833	37	21.7	1.8	18.4	1.5	0.0
Wallace River (070217)	24,667	39	21.4	5.1	12.3	2.8	1.2
Howard Creek (010308)	39,040	40	21.0	3.2	3.1	13.5	1.2
Tolt (070415)	63,357	41	21.0	0.9	5.0	12.6	2.4
Verlot (050107)	23,540	42	20.9	0.6	16.7	2.7	0.9
Skookum Creek (010309)	23,905	43	20.7	2.9	4.6	13.1	0.0

Table E-18. Percent of Watershed Classified as High for Potential Slope Instability

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent of Watershed Acreage Classified as High	Percentage Breakdown by Ownership			
				DNR	Federal	Private ^{2/}	Other ^{3/}
Day Creek (030105)	22,203	48	19.6	2.0	1.9	15.8	0.0
Hilt (040322)	12,453	50	19.1	1.3	12.3	5.4	0.0
Hazel (050203)	24,179	52	18.4	5.4	10.9	2.0	0.0
West Shannon (040435)	14,333	53	18.1	3.1	3.1	11.9	0.1
Kenney Creek (010230)	2,791	61	15.6	2.1	0.0	13.3	0.2
Stimson Hill (050215)	18,833	62	15.5	11.5	0.0	4.0	0.0
Pilchuck Mtn (070226)	42,517	63	15.2	11.8	0.1	2.3	1.0
Vedder (010131)	21,272	65	14.7	3.0	0.1	11.5	0.0
Cavanaugh (050316)	29,722	67	14.5	9.3	0.0	5.2	0.0
Jim Creek (050109)	30,690	68	14.2	2.8	3.9	7.0	0.5
Gilligan (030106)	18,879	69	14.0	4.3	0.0	9.7	0.1
Grandy (040534)	18,856	70	13.8	2.8	0.0	11.0	0.0
Rinker (040321)	20,481	71	13.2	7.5	1.7	3.9	0.1
Sauk Prairie (040320)	14,137	73	12.7	2.9	4.9	4.9	0.0
Hutchinson Creek (010310)	13,975	75	12.6	4.8	0.0	7.8	0.0
Acme (010311)	23,518	77	12.5	3.9	0.0	8.6	0.1
Ebey Hill (050214)	19,812	84	11.7	5.6	0.0	6.0	0.0
Deming (010226)	27,527	85	11.6	5.9	0.0	5.6	0.0
Lake Whatcom (010412)	35,957	86	11.5	8.4	0.0	3.1	0.0
Olney Creek (070225)	20,655	89	11.4	8.2	0.0	2.8	0.3
Nookachamps (030107)	47,730	91	11.2	5.2	0.0	5.7	0.2
Youngs Creek (070219)	23,776	107	8.8	0.9	0.5	7.3	0.1
Hansen Creek (030102)	29,010	108	8.8	2.0	0.0	6.7	0.1
Cypress (030415)	4,950	111	8.5	7.2	0.0	1.3	0.0
Friday Creek (030313)	24,129	112	8.5	2.4	0.0	5.7	0.4
Sultan River (070224)	24,388	116	7.8	4.2	1.3	1.2	1.1
Alder (030103)	22,865	117	7.7	5.9	0.0	1.8	0.0
Jordan (050108)	21,252	120	7.4	0.8	0.1	6.2	0.4
Samish River (030301)	57,397	131	6.0	1.9	0.0	3.7	0.4
Tate (070409)	9,798	136	5.3	0.7	0.0	4.7	0.0
Sumas River (010125)	36,444	139	5.0	2.2	0.0	2.8	0.0
Cherry (070420)	38,183	144	4.7	1.6	0.0	3.1	0.0
Woods Creek (070223)	42,463	145	4.6	1.8	0.0	2.6	0.2

Table E-18. Percent of Watershed Classified as High for Potential Slope Instability

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent of Watershed Acreage Classified as High	Percentage Breakdown by Ownership			
				DNR	Federal	Private ^{2/}	Other ^{3/}
Lower Pilchuck Creek (050313)	19,364	150	3.8	0.3	0.0	3.4	0.0
Samish Bay (010414)	13,258	152	3.4	1.0	0.0	2.4	0.0
Lummi Island (010617)	5,063	178	0.4	0.0	0.0	0.4	0.0
Planning Unit Average			17.1	4.7	6.2	5.8	0.4
Olympic Experimental State Forest							
Upper Clearwater (210116)	58,265	4	35.1	34.4	0.4	0.3	0.0
Rain Forest (200505)	56,435	5	34.9	3.4	31.5	0.0	0.0
Queets Corridor South (210212)	29,667	18	26.2	1.0	25.1	0.0	0.0
Kalaloch Ridge (210115)	11,472	24	24.5	15.7	0.8	7.8	0.1
Matheney-Salmon (210211)	21,630	26	23.7	1.1	10.2	0.1	12.3
Lower Clearwater (210114)	45,246	36	21.7	11.9	0.2	9.3	0.3
Middle Hoh (200607)	46,272	44	20.6	18.4	0.7	1.4	0.1
Clallam River (190303)	22,235	45	19.9	12.3	0.0	7.4	0.1
Sekiu Coastal (190301)	27,412	55	18.0	2.3	0.0	14.8	1.0
Hoko (190302)	44,534	56	17.9	5.4	0.2	12.0	0.3
Pysht River (190204)	32,972	57	17.5	1.4	4.8	11.3	0.1
Sol Duc Valley (200201)	47,220	58	16.9	4.8	8.7	3.2	0.2
Sol Duc Valley (200316)	16,585	66	14.6	6.2	5.3	2.9	0.2
Goodman-Mosquito (200610)	33,529	79	12.1	4.0	1.3	6.8	0.0
Bogachiel (200412)	44,993	90	11.3	4.6	4.0	2.5	0.1
Sol Duc Lowlands (200416)	22,368	96	10.1	1.7	4.8	3.6	0.1
Cedar (200609)	12,310	104	9.1	5.3	0.9	2.9	0.0
Hoh Lowlands (200608)	30,244	106	8.9	2.5	0.1	6.1	0.1
Queets Corridor North (210213)	39,496	110	8.7	2.2	5.1	0.6	0.8
East Dickey (200418)	26,657	126	6.5	2.7	0.0	3.7	0.1
West Dickey (200419)	28,311	137	5.1	0.8	0.0	4.3	0.0
Quillayute Bottom (200417)	23,180	141	4.9	2.0	0.6	2.0	0.3
Ozette Lake (200120)	35,130	142	4.8	0.8	1.7	2.2	0.1
Planning Unit Average			16.2	6.3	4.6	4.6	0.7
South Coast Planning Unit							
Lower Naselle (240108)	36,688	3	39.8	5.0	0.2	34.3	0.3
Naselle Headwaters (240107)	48,336	6	33.6	3.7	0.0	29.8	0.1
Curtis (230112)	43,351	49	19.5	3.4	0.0	15.8	0.3

Table E-18. Percent of Watershed Classified as High for Potential Slope Instability

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent of Watershed Acreage Classified as High	Percentage Breakdown by Ownership			
				DNR	Federal	Private ^{2/}	Other ^{3/}
Mill Creek (240305)	15,699	54	18.1	11.0	0.0	7.0	0.1
North River Headwaters (240402)	34,532	59	16.8	1.9	0.0	14.9	0.0
Garrard Creek (230220)	49,056	60	16.7	9.1	0.0	7.6	0.1
Willapa Headwaters (240306)	62,581	64	14.7	5.4	0.0	9.1	0.2
Rock-Jones (230116)	22,917	83	11.8	5.1	0.0	6.5	0.1
Elk Creek (230117)	38,773	87	11.5	4.0	0.0	7.1	0.4
Elk River (220625)	32,340	92	11.0	0.9	0.0	6.1	4.0
Lincoln Creek (230219)	48,086	94	10.6	4.2	0.0	6.4	0.0
Bunker Creek (230218)	22,788	95	10.5	4.2	0.0	6.2	0.0
Lower Willapa (240315)	32,329	100	9.4	0.7	0.0	8.7	0.0
Nemah (240212)	40,522	103	9.2	1.8	0.0	7.2	0.2
Lower Skookumchuck (230404)	44,616	118	7.6	1.6	0.0	6.0	0.0
Palix (240213)	35,825	128	6.2	1.6	0.0	4.4	0.1
Mox Chehalis (220106)	23,315	132	5.9	1.8	0.0	4.1	0.0
South Fork Willapa (240314)	26,664	147	4.4	1.9	0.0	2.4	0.1
Waddel Creek (230501)	28,982	148	4.1	3.1	0.0	1.0	0.0
Porter Creek (230522)	32,023	157	3.0	2.0	0.0	0.9	0.1
Scatter Creek (230403)	31,680	164	2.2	0.3	0.0	1.8	0.0
Cedar Creek (230521)	32,505	166	1.9	1.3	0.0	0.6	0.0
Joe-Moclips (210408)	50,805	167	1.9	0.1	0.0	0.6	1.1
Copalis River (210407)	40,529	177	0.6	0.0	0.0	0.5	0.0
Planning Unit Average			11.3	3.1	0.0	7.9	0.3
South Puget Planning Unit							
Catt (110108)	13,279	22	25.0	10.3	14.5	0.1	0.0
Tiger (080303)	40,881	47	19.6	7.9	0.0	10.2	1.5
East Creek (110113)	14,429	51	18.5	3.5	7.7	7.0	0.3
Mineral Creek (110110)	23,047	74	12.6	2.0	0.0	9.7	0.9
North Fork Mineral (110112)	16,072	81	12.0	9.4	0.0	2.5	0.2
Howard Hansen (090103)	46,472	82	11.8	5.9	0.1	4.8	1.0
North Fork Green (090104)	18,410	88	11.5	5.9	0.0	4.5	1.1
Cumberland (090202)	26,260	109	8.7	1.3	0.0	6.7	0.7
Ashford (110104)	27,680	119	7.5	1.5	3.9	2.0	0.2
Hood (150201)	145,611	130	6.1	1.6	0.1	3.9	0.5

Table E-18. Percent of Watershed Classified as High for Potential Slope Instability

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent of Watershed Acreage Classified as High	Percentage Breakdown by Ownership			
				DNR	Federal	Private ^{2/}	Other ^{3/}
Busy Wild (110204)	56,966	140	4.9	1.5	0.0	3.1	0.3
Reese Creek (110106)	5,036	143	4.8	4.7	0.0	0.0	0.0
Olympia (130202)	18,529	151	3.6	0.9	0.0	2.6	0.1
Summit Lake (140002)	29,140	163	2.4	0.7	0.0	1.6	0.1
Squaxin (140003)	1,066	176	0.7	0.3	0.0	0.0	0.5
Planning Unit Average			10.0	3.8	1.7	3.9	0.5
Straits Planning Unit							
Twins (190206)	20,351	2	50.9	12.9	31.0	6.9	0.2
Hamma Hamma (160203)	69,941	20	25.7	2.1	22.5	1.1	0.0
Big Quil (170108)	51,823	25	23.9	0.9	22.2	0.7	0.0
Sutherland-Aldwell (180310)	35,109	38	21.5	3.2	14.3	3.7	0.3
Lyre (190107)	11,021	46	19.7	13.5	2.2	3.6	0.4
Little Quil (170107)	28,536	76	12.5	0.7	7.2	4.6	0.0
Salt (190108)	26,336	78	12.2	8.8	0.0	3.0	0.4
Dabob (170106)	16,871	93	10.8	3.7	0.0	6.9	0.2
Port Angeles (180211)	24,883	99	9.6	3.3	2.3	3.8	0.2
Lilliwaup (160204)	29,080	101	9.3	3.4	2.1	3.7	0.1
Siebert McDonald (180202)	35,481	105	9.0	2.4	4.5	2.0	0.0
Sequim Bay (170201)	26,752	115	8.1	2.4	3.7	1.8	0.1
Discovery Bay (170202)	58,871	121	7.3	1.3	2.8	3.0	0.2
Dungeness Valley (180103)	43,200	125	6.6	1.2	4.6	0.7	0.1
Thorndike (170105)	16,587	127	6.4	0.7	1.1	4.4	0.2
Ludlow (170104)	22,897	149	4.1	0.3	0.0	3.7	0.0
Chimakum (170203)	28,202	158	2.9	0.2	0.2	2.5	0.1
Bell Creek (180104)	5,969	159	2.7	0.7	0.0	2.0	0.0
Planning Unit Average			13.5	3.4	6.7	3.2	0.1

1/ Watershed with greater than 5% ownership that have areas classified as high for potential slope instability are ranked by percent area of watershed that meets these criteria.

2/ Includes privately owned industrial and non-industrial (i.e., small landowner) forest land

3/ Includes, municipal, tribal, non-DNR state lands, and other lands

Table E-19. Percent of the Forested Area in Each Watershed Classified as Moderate for Slope Stability ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Percent of Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Columbia Planning Unit							
Swift Creek (270304)	74,150	176	20%	2%	8%	11%	0%
Middle Kalama (270114)	51,534	173	25%	2%	0%	23%	0%
Spirit Lake (260507)	52,151	168	22%	3%	18%	1%	0%
Lower Kalama (270113)	49,823	167	22%	2%	0%	20%	0%
Siouxon (270305)	39,066	165	26%	10%	16%	0%	0%
Upper SF Toutle (260508)	40,031	162	24%	8%	5%	11%	0%
North Elochoman (250203)	23,518	161	41%	8%	0%	33%	0%
Green River (260515)	46,383	159	21%	1%	0%	19%	1%
Lake Merwin (270415)	46,439	156	20%	9%	0%	10%	0%
South Fork Grays River (250302)	16,774	155	54%	16%	0%	38%	0%
Grays Bay (250310)	56,613	153	15%	2%	0%	13%	0%
North Fork Toutle (260514)	41,051	148	20%	6%	0%	13%	1%
Upper Washougal (280205)	31,719	147	26%	18%	3%	5%	0%
South Fork Toutle (260513)	42,623	145	19%	5%	0%	14%	0%
Abernethy (250104)	40,071	135	18%	11%	0%	7%	0%
Bremer (260331)	19,894	133	34%	7%	4%	22%	1%
Cougar (270317)	32,888	131	21%	9%	7%	4%	0%
Silverstar (280204)	32,719	130	20%	6%	3%	11%	1%
Rock Creek Clark (270508)	35,440	129	18%	3%	6%	8%	0%
Skamokawa (250209)	51,687	124	11%	3%	0%	8%	0%
Stillwater (260625)	28,905	123	20%	2%	0%	18%	0%
Rock Creek (290415)	41,733	112	12%	6%	5%	2%	0%
Cedar Creek (270416)	36,416	108	13%	2%	0%	10%	0%
Delameter (260623)	37,243	106	13%	1%	0%	12%	0%
Woodland (270412)	37,827	97	12%	4%	0%	8%	0%
Winston (260320)	28,321	95	15%	3%	0%	12%	1%
Cold Creek (270509)	21,281	90	19%	14%	1%	3%	0%
Main Elochoman (250208)	37,009	84	10%	3%	0%	7%	0%
Little Washougal (280203)	30,269	81	12%	5%	0%	7%	0%
Salmon Creek (260421)	43,837	79	8%	1%	0%	6%	0%
Hamilton Creek (280106)	32,845	72	10%	3%	2%	2%	2%
Wind River (290414)	30,669	71	10%	1%	8%	1%	0%
Mill Creek (260429)	26,163	56	10%	1%	0%	9%	0%
Lacamas (280202)	41,185	45	5%	1%	1%	3%	0%
West Fork Grays River (250311)	10,347	44	22%	4%	0%	18%	0%

Table E-19. Percent of the Forested Area in Each Watershed Classified as Moderate for Slope Stability ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Percent of Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}				
				DNR	Federal	Private ^{5/}	Other ^{6/}	
Olequa (260626)	35,017	42	6%	1%	0%	5%	0%	
Harmony (260330)	22,546	36	9%	1%	0%	7%	0%	
Cedar Creek (260428)	14,441	21	9%	0%	0%	8%	0%	
Planning Unit Average			18%	5%	2%	11%	0%	
North Puget Planning Unit								
South Snoqualmie (070306)	57,077	179	69%	8%	48%	7%	7%	
North Fork Snoqualmie (070313)	66,707	174	21%	2%	11%	7%	0%	
Spada (070216)	44,197	172	29%	19%	8%	1%	1%	
Silverton (050106)	46,399	170	26%	2%	23%	0%	0%	
Tolt (070415)	63,357	163	16%	1%	4%	10%	1%	
French Boulder (050204)	45,327	160	21%	1%	19%	1%	0%	
Jordan-Boulder (040224)	32,726	154	28%	7%	12%	9%	0%	
Tenas (040319)	36,688	144	22%	2%	19%	2%	0%	
East Shannon (040436)	34,065	143	23%	2%	17%	4%	0%	
Deer Creek (050201)	41,881	142	19%	3%	11%	5%	0%	
Marmot Ridge (010306)	31,794	141	24%	4%	18%	2%	0%	
Howard Creek (010308)	39,040	140	19%	3%	2%	13%	1%	
Upper NF Stilly (050202)	32,833	137	23%	2%	18%	2%	0%	
Canyon Creek (010232)	36,807	136	20%	2%	10%	8%	0%	
Lake Whatcom (010412)	35,957	126	17%	10%	0%	7%	0%	
Lower MF Snoqualmie (070307)	28,375	122	20%	11%	6%	2%	0%	
Wallace River (070217)	24,667	120	22%	7%	11%	3%	2%	
Pilchuck Mtn (070226)	42,517	119	13%	9%	0%	2%	1%	
Warnick (010229)	25,436	118	21%	16%	0%	5%	0%	
Skookum Creek (010309)	23,905	114	22%	5%	4%	13%	0%	
Raging River (070408)	22,853	113	22%	6%	0%	16%	0%	
Corkindale (040531)	24,194	109	20%	1%	15%	3%	0%	
Deming (010226)	27,527	102	16%	8%	0%	8%	0%	
Jim Creek (050109)	30,690	101	15%	3%	4%	6%	1%	
Nookachamps (030107)	47,730	96	9%	4%	0%	5%	0%	
Samish River (030301)	57,397	93	7%	3%	0%	4%	0%	
Jackman (040529)	16,399	92	25%	2%	14%	9%	0%	
Youngs Creek (070219)	23,776	89	17%	2%	0%	14%	0%	
Day Creek (030105)	22,203	87	18%	2%	2%	14%	0%	
Verlot (050107)	23,540	86	17%	1%	13%	2%	1%	
Hazel (050203)	24,179	85	16%	5%	8%	3%	0%	

Table E-19. Percent of the Forested Area in Each Watershed Classified as Moderate for Slope Stability ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Percent of Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}				
				DNR	Federal	Private ^{5/}	Other ^{6/}	
Porter Canyon (010327)	18,550	83	20%	7%	0%	11%	2%	
Acme (010311)	23,518	77	15%	6%	0%	9%	0%	
Clearwater Creek (010328)	14,330	74	23%	11%	10%	2%	0%	
Cherry (070420)	38,183	73	9%	2%	0%	6%	0%	
Loretta (030104)	15,769	67	19%	2%	8%	10%	0%	
Cavanaugh (050316)	29,722	66	10%	7%	0%	4%	0%	
Olney Creek (070225)	20,655	63	14%	7%	0%	6%	0%	
Rinker (040321)	20,481	62	14%	7%	2%	5%	0%	
Hansen Creek (030102)	29,010	61	10%	3%	0%	7%	0%	
Hilt (040322)	12,453	59	23%	2%	13%	8%	0%	
Vedder (010131)	21,272	58	13%	3%	0%	10%	0%	
Friday Creek (030313)	24,129	57	11%	3%	0%	8%	1%	
Sauk Prairie (040320)	14,137	54	18%	6%	5%	8%	0%	
Grandy (040534)	18,856	53	14%	3%	0%	10%	0%	
Hutchinson Creek (010310)	13,975	52	18%	7%	0%	11%	0%	
Woods Creek (070223)	42,463	49	6%	2%	0%	4%	0%	
Sumas River (010125)	36,444	48	7%	2%	0%	4%	0%	
Alder (030103)	22,865	43	10%	8%	0%	2%	0%	
Sultan River (070224)	24,388	40	9%	6%	1%	1%	1%	
West Shannon (040435)	14,333	39	14%	3%	3%	9%	0%	
Gilligan (030106)	18,879	38	11%	2%	0%	8%	0%	
Ebey Hill (050214)	19,812	37	10%	5%	0%	5%	0%	
Jordan (050108)	21,252	32	8%	1%	0%	7%	0%	
Stimson Hill (050215)	18,833	24	8%	4%	0%	3%	0%	
Tate (070409)	9,798	12	9%	2%	0%	7%	0%	
Lower Pilchuck Creek (050313)	19,364	8	4%	0%	0%	3%	0%	
Kenney Creek (010230)	2,791	7	20%	1%	0%	19%	0%	
Samish Bay (010414)	13,258	5	2%	0%	0%	2%	0%	
Cypress (030415)	4,950	3	3%	2%	0%	1%	0%	
Lummi Island (010617)	5,063	1	1%	0%	0%	1%	0%	
Planning Unit Average			17%	4%	6%	6%	0%	
Olympic Experimental State Forest								
Rain Forest (200505)	56,435	166	19%	2%	17%	0%	0%	
Upper Clearwater (210116)	58,265	138	13%	13%	0%	0%	0%	
Hoko (190302)	44,534	110	11%	3%	0%	8%	0%	
Middle Hoh (200607)	46,272	105	10%	9%	0%	1%	0%	

Table E-19. Percent of the Forested Area in Each Watershed Classified as Moderate for Slope Stability ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Percent of Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}				
				DNR	Federal	Private ^{5/}	Other ^{6/}	
Sol Duc Valley (200201)	47,220	104	10%	2%	6%	2%	0%	
Bogachiel (200412)	44,993	78	8%	3%	1%	3%	0%	
Lower Clearwater (210114)	45,246	75	8%	4%	0%	4%	0%	
Queets Corridor South (210212)	29,667	70	11%	1%	10%	0%	0%	
Sekiu Coastal (190301)	27,412	68	11%	1%	0%	9%	0%	
Goodman-Mosquito (200610)	33,529	65	9%	3%	1%	4%	0%	
Pysht River (190204)	32,972	60	9%	1%	2%	7%	0%	
Clallam River (190303)	22,235	47	10%	6%	0%	5%	0%	
Queets Corridor North (210213)	39,496	35	5%	2%	2%	0%	0%	
Matheney-Salmon (210211)	21,630	31	8%	1%	3%	0%	0%	
Ozette Lake (200120)	35,130	29	5%	1%	2%	2%	0%	
Hoh Lowlands (200608)	30,244	26	5%	1%	0%	3%	0%	
East Dickey (200418)	26,657	23	5%	2%	0%	3%	0%	
West Dickey (200419)	28,311	20	5%	0%	0%	4%	0%	
Sol Duc Lowlands (200416)	22,368	16	5%	1%	1%	2%	0%	
Quillayute Bottom (200417)	23,180	15	5%	2%	1%	2%	0%	
Kalaloch Ridge (210115)	11,472	13	9%	5%	1%	3%	0%	
Sol Duc Valley (200316)	16,585	11	5%	2%	1%	2%	0%	
Cedar (200609)	12,310	9	6%	3%	1%	3%	0%	
Planning Unit Average			8%	3%	2%	3%	0%	
South Coast Planning Unit								
Naselle Headwaters (240107)	48,336	177	32%	2%	0%	30%	0%	
Waddel Creek (230501)	28,982	164	35%	32%	0%	4%	0%	
Lower Skookumchuck (230404)	44,616	157	21%	8%	0%	13%	0%	
Curtis (230112)	43,351	151	20%	6%	0%	14%	0%	
Lower Naselle (240108)	36,688	150	23%	4%	0%	19%	0%	
Willapa Headwaters (240306)	62,581	149	13%	4%	0%	9%	0%	
Porter Creek (230522)	32,023	134	22%	21%	0%	1%	0%	
Nemah (240212)	40,522	128	15%	4%	0%	11%	0%	
Cedar Creek (230521)	32,505	127	19%	17%	0%	1%	0%	
Garrard Creek (230220)	49,056	117	11%	5%	0%	6%	0%	
South Fork Willapa (240314)	26,664	115	19%	8%	0%	11%	1%	
Elk Creek (230117)	38,773	111	13%	5%	0%	7%	1%	
Palix (240213)	35,825	103	13%	1%	0%	11%	1%	
Lincoln Creek (230219)	48,086	100	9%	4%	0%	5%	0%	
North River Headwaters (240402)	34,532	82	11%	1%	0%	10%	0%	

Table E-19. Percent of the Forested Area in Each Watershed Classified as Moderate for Slope Stability ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Percent of Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}				
				DNR	Federal	Private ^{5/}	Other ^{6/}	
Lower Willapa (240315)	32,329	69	10%	1%	0%	9%	0%	
Mox Chehalis (220106)	23,315	51	11%	4%	0%	7%	0%	
Rock-Jones (230116)	22,917	50	11%	3%	0%	7%	0%	
Elk River (220625)	32,340	34	6%	0%	0%	3%	2%	
Bunker Creek (230218)	22,788	33	8%	3%	0%	5%	0%	
Mill Creek (240305)	15,699	30	11%	8%	0%	3%	0%	
Joe-Moclips (210408)	50,805	27	3%	0%	0%	1%	0%	
Scatter Creek (230403)	31,680	22	4%	1%	0%	3%	0%	
Copalis River (210407)	40,529	6	1%	0%	0%	1%	0%	
Planning Unit Average			14%	6%	0%	8%	0%	
South Puget Planning Unit								
Howard Hansen (090103)	46,472	171	26%	10%	0%	13%	2%	
Mineral Creek (110110)	23,047	169	49%	11%	0%	36%	3%	
Busy Wild (110204)	56,966	158	17%	4%	0%	11%	1%	
North Fork Mineral (110112)	16,072	152	53%	46%	0%	6%	1%	
Hood (150201)	145,611	146	6%	1%	0%	3%	1%	
Catt (110108)	13,279	139	56%	30%	27%	0%	0%	
Tiger (080303)	40,881	121	14%	4%	0%	9%	1%	
East Creek (110113)	14,429	116	37%	8%	13%	15%	1%	
Summit Lake (140002)	29,140	99	15%	9%	0%	6%	0%	
Ashford (110104)	27,680	98	16%	4%	7%	4%	0%	
North Fork Green (090104)	18,410	94	23%	9%	0%	13%	2%	
Olympia (130202)	18,529	76	19%	11%	0%	7%	0%	
Cumberland (090202)	26,260	64	11%	2%	0%	8%	1%	
Reese Creek (110106)	5,036	10	18%	18%	0%	0%	0%	
Squaxin (140003)	1,066	2	4%	1%	0%	0%	0%	
Planning Unit Average			24%	11%	3%	9%	1%	
Straits Planning Unit								
Hamma Hamma (160203)	69,941	178	25%	3%	21%	1%	0%	
Big Quil (170108)	51,823	175	27%	1%	25%	1%	0%	
Sutherland-Aldwell (180310)	35,109	132	19%	3%	13%	3%	0%	
Twins (190206)	20,351	125	29%	8%	18%	3%	0%	
Discovery Bay (170202)	58,871	107	8%	1%	2%	4%	0%	
Little Quil (170107)	28,536	91	14%	1%	9%	4%	0%	
Lilliwaup (160204)	29,080	88	13%	8%	3%	3%	0%	

Table E-19. Percent of the Forested Area in Each Watershed Classified as Moderate for Slope Stability ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Percent of Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}				
				DNR	Federal	Private ^{5/}	Other ^{6/}	
Sequim Bay (170201)	26,752	80	13%	5%	5%	3%	0%	
Dungeness Valley (180103)	43,200	55	6%	1%	3%	2%	0%	
Port Angeles (180211)	24,883	46	9%	3%	3%	3%	0%	
Siebert McDonald (180202)	35,481	41	6%	2%	2%	2%	0%	
Salt (190108)	26,336	28	6%	3%	0%	2%	0%	
Ludlow (170104)	22,897	25	6%	0%	0%	6%	0%	
Dabob (170106)	16,871	19	7%	2%	0%	5%	0%	
Lyre (190107)	11,021	18	11%	6%	3%	2%	0%	
Chimakum (170203)	28,202	17	4%	0%	0%	4%	0%	
Thorndike (170105)	16,587	14	6%	1%	0%	5%	0%	
Bell Creek (180104)	5,969	4	5%	1%	0%	4%	0%	
Planning Unit Average			12%	3%	6%	3%	0%	

1/ Watershed with greater than 5% ownership that have soils classified as moderate potential slope instability are ranked by percent area of watershed that meets these criteria.

2/ Includes privately owned industrial and non-industrial (i.e., small landowner) forest land

3/ Includes, municipal, tribal, non-DNR state lands, and other lands

Table E-20. Percent of Watershed Area Classified as High for Moist Soil Compaction Potential

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent Classified as High	DNR	Percentage Breakdown by Ownership		
					Federal	Private ^{2/}	Other ^{3/}
Columbia Planning Unit							
Cedar Creek (260428)	14,441	4	99%	6%	0%	88%	5%
Olequa (260626)	35,017	5	99%	7%	0%	91%	1%
Stillwater (260625)	28,905	13	96%	7%	0%	88%	0%
Abernethy (250104)	40,071	15	95%	51%	0%	40%	3%
Delameter (260623)	37,243	16	95%	5%	0%	89%	0%
Main Elochoman (250208)	37,009	24	91%	22%	3%	64%	1%
Little Washougal (280203)	30,269	31	89%	19%	0%	69%	1%
Winston (260320)	28,321	32	89%	22%	0%	65%	2%
Mill Creek (260429)	26,163	33	89%	10%	0%	79%	0%
Lacamas (280202)	41,185	37	86%	8%	7%	68%	3%
Lower Kalama (270113)	49,823	38	86%	5%	0%	80%	1%
Salmon Creek (260421)	43,837	39	86%	6%	0%	77%	3%
Skamokawa (250209)	51,687	42	84%	20%	2%	59%	2%
South Fork Toutle (260513)	42,623	45	82%	15%	0%	65%	1%
Cedar Creek (270416)	36,416	47	82%	9%	0%	71%	1%
Harmony (260330)	22,546	48	81%	5%	0%	74%	2%
South Fork Grays River (250302)	16,774	49	81%	19%	0%	61%	0%
Woodland (270412)	37,827	54	79%	10%	0%	69%	0%
West Fork Grays River (250311)	10,347	55	79%	17%	0%	62%	0%
North Elochoman (250203)	23,518	60	78%	13%	0%	65%	0%
Grays Bay (250310)	56,613	71	73%	9%	0%	64%	1%
Middle Kalama (270114)	51,534	83	67%	5%	0%	61%	0%
Green River (260515)	46,383	85	65%	4%	0%	58%	3%
Cold Creek (270509)	21,281	95	59%	46%	1%	12%	0%
Bremer (260331)	19,894	97	57%	11%	1%	44%	1%
Rock Creek Clark (270508)	35,440	100	57%	10%	0%	45%	1%
Lake Merwin (270415)	46,439	114	48%	14%	0%	34%	0%
Silverstar (280204)	32,719	115	44%	12%	1%	31%	1%
North Fork Toutle (260514)	41,051	118	43%	16%	0%	27%	0%
Upper Washougal (280205)	31,719	124	39%	30%	0%	9%	0%
Rock Creek (290415)	41,733	132	34%	16%	0%	17%	0%
Wind River (290414)	30,669	137	31%	8%	8%	14%	2%
Hamilton Creek (280106)	32,845	138	29%	11%	8%	7%	3%

Table E-20. Percent of Watershed Area Classified as High for Moist Soil Compaction Potential

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent Classified as High		Percentage Breakdown by Ownership		
					Federal	Private ^{2/}	Other ^{3/}
Upper SF Toutle (260508)	40,031	154	16%	5%	1%	10%	0%
Siouxon (270305)	39,066	155	15%	15%	0%	0%	0%
Cougar (270317)	32,888	174	2%	1%	0%	1%	0%
Swift Creek (270304)	74,150	176	1%	0%	0%	0%	0%
Spirit Lake (260507)	52,151	177	0%	0%	0%	0%	0%
Planning Unit Average			64%	13%	1%	49%	1%
North Puget Planning Unit							
Cavanaugh (050316)	29,722	26	90%	55%	0%	35%	0%
Hansen Creek (030102)	29,010	35	86%	13%	0%	71%	3%
Tate (070409)	9,798	40	85%	6%	0%	78%	0%
Friday Creek (030313)	24,129	43	84%	15%	0%	67%	2%
Nookachamps (030107)	47,730	46	82%	27%	0%	54%	1%
Hutchinson Creek (010310)	13,975	51	80%	32%	0%	48%	0%
Day Creek (030105)	22,203	52	80%	8%	1%	70%	0%
Pilchuck Mtn (070226)	42,517	53	79%	58%	0%	20%	1%
Jim Creek (050109)	30,690	56	78%	20%	15%	39%	4%
Woods Creek (070223)	42,463	57	78%	23%	0%	53%	3%
Porter Canyon (010327)	18,550	58	78%	31%	0%	38%	10%
Warnick (010229)	25,436	59	78%	57%	1%	20%	0%
Alder (030103)	22,865	62	77%	49%	0%	29%	0%
Cherry (070420)	38,183	63	77%	14%	0%	62%	1%
Kenney Creek (010230)	2,791	64	76%	6%	0%	70%	0%
Sultan River (070224)	24,388	65	76%	47%	7%	14%	8%
Howard Creek (010308)	39,040	66	76%	15%	1%	55%	5%
Raging River (070408)	22,853	68	75%	24%	0%	50%	1%
Lower Pilchuck Creek (050313)	19,364	70	74%	6%	0%	67%	0%
Acme (010311)	23,518	72	73%	25%	0%	47%	0%
Stimson Hill (050215)	18,833	74	72%	32%	0%	40%	0%
Gilligan (030106)	18,879	75	72%	15%	0%	55%	2%
Samish River (030301)	57,397	76	71%	13%	0%	56%	2%
Deming (010226)	27,527	77	71%	33%	0%	38%	0%
Samish Bay (010414)	13,258	78	69%	22%	0%	39%	8%
Lake Whatcom (010412)	35,957	79	69%	30%	0%	39%	0%

Table E-20. Percent of Watershed Area Classified as High for Moist Soil Compaction Potential

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent Classified as High		Percentage Breakdown by Ownership		
					Federal	Private ^{2/}	Other ^{3/}
Vedder (010131)	21,272	80	69%	10%	0%	58%	0%
Grandy (040534)	18,856	81	68%	14%	0%	54%	0%
Youngs Creek (070219)	23,776	87	65%	8%	0%	56%	0%
Skookum Creek (010309)	23,905	88	65%	21%	2%	42%	0%
Jordan (050108)	21,252	90	62%	6%	0%	56%	0%
Sumas River (010125)	36,444	92	61%	8%	0%	53%	0%
Rinker (040321)	20,481	94	59%	33%	1%	25%	0%
Olney Creek (070225)	20,655	96	58%	28%	0%	30%	1%
West Shannon (040435)	14,333	98	57%	13%	0%	43%	0%
Lummi Island (010617)	5,063	99	57%	7%	0%	45%	4%
Ebey Hill (050214)	19,812	101	55%	34%	0%	21%	0%
Clearwater Creek (010328)	14,330	106	51%	44%	1%	5%	1%
Tolt (070415)	63,357	107	50%	3%	2%	41%	5%
Loretta (030104)	15,769	109	50%	6%	2%	42%	0%
Sauk Prairie (040320)	14,137	111	49%	17%	0%	31%	0%
Hazel (050203)	24,179	116	44%	26%	4%	14%	0%
Jackman (040529)	16,399	117	44%	2%	9%	32%	0%
Canyon Creek (010232)	36,807	119	41%	12%	0%	29%	1%
Wallace River (070217)	24,667	120	41%	22%	1%	13%	5%
Lower MF Snoqualmie (070307)	28,375	122	40%	19%	9%	12%	0%
Deer Creek (050201)	41,881	125	39%	15%	1%	22%	0%
South Snoqualmie (070306)	57,077	127	37%	4%	11%	18%	5%
Corkindale (040531)	24,194	128	36%	3%	12%	19%	2%
Verlot (050107)	23,540	133	32%	4%	4%	23%	1%
North Fork Snoqualmie (070313)	66,707	135	31%	2%	6%	21%	2%
Hilt (040322)	12,453	141	27%	5%	1%	21%	0%
East Shannon (040436)	34,065	142	27%	8%	2%	17%	0%
Spada (070216)	44,197	144	25%	17%	1%	0%	7%
Jordan-Boulder (040224)	32,726	145	24%	11%	2%	11%	0%
Marmot Ridge (010306)	31,794	146	22%	13%	0%	9%	0%
French Boulder (050204)	45,327	147	22%	11%	4%	7%	0%
Upper NF Stilly (050202)	32,833	158	13%	6%	2%	6%	0%
Tenas (040319)	36,688	159	13%	7%	2%	4%	0%
Cypress (030415)	4,950	169	6%	5%	0%	0%	0%

Table E-20. Percent of Watershed Area Classified as High for Moist Soil Compaction Potential

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent Classified as High		Percentage Breakdown by Ownership		
					Federal	Private ^{2/}	Other ^{3/}
Silverton (050106)	46,399	173	3%	1%	1%	0%	0%
Planning Unit Average			57%	18%	2%	35%	1%
Olympic Experimental State Forest							
Sekiu Coastal (190301)	27,412	21	92%	13%	0%	78%	0%
West Dickey (200419)	28,311	23	91%	11%	0%	79%	1%
Pysht River (190204)	32,972	29	89%	6%	10%	73%	0%
Hoko (190302)	44,534	30	89%	22%	1%	64%	2%
Kalaloch Ridge (210115)	11,472	34	88%	54%	0%	34%	0%
Lower Clearwater (210114)	45,246	36	86%	42%	0%	42%	2%
East Dickey (200418)	26,657	41	85%	38%	0%	46%	1%
Clallam River (190303)	22,235	61	78%	42%	0%	34%	1%
Goodman-Mosquito (200610)	33,529	73	73%	28%	0%	44%	0%
Hoh Lowlands (200608)	30,244	82	68%	22%	0%	45%	1%
Cedar (200609)	12,310	86	65%	32%	0%	33%	1%
Sol Duc Valley (200201)	47,220	89	63%	21%	24%	17%	1%
Quillayute Bottom (200417)	23,180	91	61%	22%	0%	35%	4%
Bogachiel (200412)	44,993	93	60%	27%	1%	31%	1%
Ozette Lake (200120)	35,130	102	55%	13%	2%	39%	1%
Queets Corridor North (210213)	39,496	103	52%	22%	1%	7%	22%
Sol Duc Lowlands (200416)	22,368	105	51%	12%	2%	36%	1%
Upper Clearwater (210116)	58,265	113	48%	47%	0%	1%	0%
Sol Duc Valley (200316)	16,585	121	41%	14%	0%	25%	1%
Middle Hoh (200607)	46,272	123	40%	25%	1%	13%	0%
Matheney-Salmon (210211)	21,630	148	20%	10%	0%	1%	9%
Queets Corridor South (210212)	29,667	151	20%	19%	0%	0%	0%
Rain Forest (200505)	56,435	172	3%	3%	0%	0%	0%
Planning Unit Average			62%	24%	2%	34%	2%
South Coast Planning Unit							
Bunker Creek (230218)	22,788	1	100%	29%	0%	70%	0%
North River Headwaters (240402)	34,532	2	100%	10%	0%	90%	0%
Palix (240213)	35,825	3	99%	10%	0%	86%	3%
Lower Naselle (240108)	36,688	6	98%	15%	1%	81%	1%
Lincoln Creek (230219)	48,086	7	97%	29%	0%	68%	1%

Table E-20. Percent of Watershed Area Classified as High for Moist Soil Compaction Potential

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent Classified as High		Percentage Breakdown by Ownership		
					Federal	Private ^{2/}	Other ^{3/}
South Fork Willapa (240314)	26,664	8	97%	37%	0%	57%	3%
Nemah (240212)	40,522	9	97%	26%	0%	69%	2%
Willapa Headwaters (240306)	62,581	10	96%	29%	0%	66%	1%
Curtis (230112)	43,351	11	96%	16%	0%	79%	2%
Mill Creek (240305)	15,699	12	96%	63%	0%	32%	0%
Joe-Moclips (210408)	50,805	14	95%	7%	0%	42%	46%
Cedar Creek (230521)	32,505	17	95%	80%	0%	12%	3%
Rock-Jones (230116)	22,917	18	94%	29%	0%	63%	2%
Naselle Headwaters (240107)	48,336	19	94%	11%	0%	82%	0%
Garrard Creek (230220)	49,056	20	92%	39%	0%	52%	1%
Porter Creek (230522)	32,023	22	91%	79%	0%	11%	1%
Copalis River (210407)	40,529	25	91%	5%	0%	68%	17%
Lower Willapa (240315)	32,329	27	90%	5%	0%	84%	0%
Elk Creek (230117)	38,773	28	90%	31%	0%	56%	3%
Elk River (220625)	32,340	44	83%	11%	0%	46%	27%
Lower Skookumchuck (230404)	44,616	50	81%	16%	0%	64%	0%
Mox Chehalis (220106)	23,315	67	75%	21%	0%	54%	0%
Waddel Creek (230501)	28,982	84	65%	52%	0%	13%	0%
Scatter Creek (230403)	31,680	129	36%	5%	0%	30%	1%
Planning Unit Average			89%	27%	0%	57%	5%
South Puget Planning Unit							
Busy Wild (110204)	56,966	69	74%	21%	0%	45%	8%
North Fork Green (090104)	18,410	108	50%	17%	0%	26%	8%
East Creek (110113)	14,429	112	49%	16%	4%	27%	1%
Howard Hansen (090103)	46,472	126	37%	14%	0%	19%	4%
Ashford (110104)	27,680	134	31%	17%	0%	14%	0%
Olympia (130202)	18,529	136	31%	12%	0%	17%	2%
Squaxin (140003)	1,066	139	28%	8%	0%	0%	20%
Summit Lake (140002)	29,140	143	25%	11%	0%	14%	0%
Cumberland (090202)	26,260	149	20%	4%	0%	16%	1%
Tiger (080303)	40,881	152	18%	10%	0%	6%	1%
Reese Creek (110106)	5,036	157	14%	14%	0%	0%	0%
Mineral Creek (110110)	23,047	163	11%	2%	0%	9%	1%

Table E-20. Percent of Watershed Area Classified as High for Moist Soil Compaction Potential

Watershed Name (and Number)	Total Acres	Rank ^{1/}	Percent Classified as High		Percentage Breakdown by Ownership		
					Federal	Private ^{2/}	Other ^{3/}
North Fork Mineral (110112)	16,072	168	6%	4%	0%	2%	0%
Hood (150201)	145,611	170	5%	0%	0%	3%	1%
Catt (110108)	13,279	171	4%	3%	1%	0%	0%
Planning Unit Average			27%	10%	0%	13%	3%
Stratits Planning Unit							
Twins (190206)	20,351	104	51%	31%	5%	15%	0%
Lyre (190107)	11,021	110	49%	29%	1%	18%	1%
Salt (190108)	26,336	130	35%	15%	0%	18%	3%
Bell Creek (180104)	5,969	131	34%	3%	0%	31%	0%
Sequim Bay (170201)	26,752	140	28%	14%	1%	12%	1%
Dungeness Valley (180103)	43,200	150	20%	6%	1%	13%	0%
Little Quil (170107)	28,536	153	17%	2%	0%	15%	0%
Sutherland-Aldwell (180310)	35,109	156	15%	6%	2%	6%	0%
Dabob (170106)	16,871	160	13%	3%	0%	9%	0%
Discovery Bay (170202)	58,871	161	12%	2%	0%	10%	0%
Chimakum (170203)	28,202	162	11%	0%	2%	9%	0%
Port Angeles (180211)	24,883	164	11%	6%	0%	5%	0%
Ludlow (170104)	22,897	165	10%	1%	0%	9%	0%
Thorndike (170105)	16,587	166	9%	1%	1%	6%	0%
Siebert McDonald (180202)	35,481	167	8%	2%	0%	6%	0%
Big Quil (170108)	51,823	175	2%	1%	0%	1%	0%
Lilliwaup (160204)	29,080	178	0%	0%	0%	0%	0%
Hamma Hamma (160203)	69,941	179	0%	0%	0%	0%	0%
Planning Unit Average			18%	7%	1%	10%	0%

1/ Watershed with greater than 5% ownership that have soils classified as high for moist soil compaction potential are ranked by percent area of watershed that meets these criteria.

3/ Includes privately owned industrial and non-industrial (i.e., small landowner) forest land

3/ Includes, municipal, tribal, non-DNR state lands, and other lands

Table E-21. Percent of the Watershed Classified as Moderate for Moist Soil Compaction Potential ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Columbia Planning Unit							
Swift Creek (270304)	74,150	10	60%	5%	15%	39%	0%
Hamilton Creek (280106)	32,845	16	55%	8%	16%	20%	11%
Upper SF Toutle (260508)	40,031	18	51%	17%	6%	27%	2%
Cougar (270317)	32,888	21	48%	29%	12%	7%	0%
Rock Creek (290415)	41,733	29	37%	18%	1%	16%	1%
Bremer (260331)	19,894	30	36%	4%	6%	25%	1%
Lake Merwin (270415)	46,439	31	36%	22%	0%	13%	0%
Silverstar (280204)	32,719	32	36%	12%	1%	22%	1%
Spirit Lake (260507)	52,151	36	32%	4%	28%	0%	0%
Middle Kalama (270114)	51,534	40	30%	3%	0%	27%	0%
Cold Creek (270509)	21,281	45	27%	22%	1%	4%	0%
North Elochoman (250203)	23,518	54	22%	5%	0%	17%	0%
West Fork Grays River (250311)	10,347	57	21%	1%	0%	19%	0%
Upper Washougal (280205)	31,719	59	20%	14%	0%	6%	0%
Green River (260515)	46,383	61	20%	1%	0%	17%	1%
Siouxon (270305)	39,066	62	19%	19%	0%	0%	0%
South Fork Grays River (250302)	16,774	65	18%	8%	0%	9%	0%
Cedar Creek (270416)	36,416	66	17%	2%	0%	15%	1%
North Fork Toutle (260514)	41,051	69	16%	7%	0%	8%	0%
Rock Creek Clark (270508)	35,440	82	12%	3%	0%	9%	0%
Grays Bay (250310)	56,613	84	11%	0%	0%	11%	0%
South Fork Toutle (260513)	42,623	85	11%	4%	0%	7%	0%
Winston (260320)	28,321	92	10%	2%	0%	7%	1%
Lacamas (280202)	41,185	93	10%	1%	0%	9%	0%
Skamokawa (250209)	51,687	94	10%	2%	0%	8%	0%
Salmon Creek (260421)	43,837	97	9%	2%	0%	7%	0%
Harmony (260330)	22,546	98	9%	0%	0%	8%	2%
Woodland (270412)	37,827	105	8%	5%	0%	3%	0%
Mill Creek (260429)	26,163	109	8%	0%	0%	7%	0%
Little Washougal (280203)	30,269	114	7%	4%	0%	3%	0%
Wind River (290414)	30,669	120	7%	2%	3%	2%	0%
Stillwater (260625)	28,905	142	4%	0%	0%	4%	0%
Abernethy (250104)	40,071	153	2%	2%	0%	0%	0%
Lower Kalama (270113)	49,823	158	2%	1%	0%	1%	0%

Table E-21. Percent of the Watershed Classified as Moderate for Moist Soil Compaction Potential ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Olequa (260626)	35,017	165	1%	0%	0%	1%	0%
Delameter (260623)	37,243	167	1%	0%	0%	1%	0%
Cedar Creek (260428)	14,441	170	1%	0%	0%	1%	0%
Main Elochoman (250208)	37,009	173	0%	0%	0%	0%	0%
Planning Unit Average			19%	6%	2%	10%	1%
North Puget Planning Unit							
Cypress (030415)	4,950	1	93%	84%	0%	10%	0%
Tolt (070415)	63,357	34	34%	5%	5%	20%	4%
Lower MF Snoqualmie (070307)	28,375	41	29%	20%	5%	4%	0%
North Fork Snoqualmie (070313)	66,707	42	29%	3%	6%	19%	1%
Sumas River (010125)	36,444	43	28%	1%	0%	27%	0%
Jordan-Boulder (040224)	32,726	44	28%	10%	0%	17%	0%
Vedder (010131)	21,272	47	25%	4%	0%	21%	0%
South Snoqualmie (070306)	57,077	48	25%	4%	15%	2%	4%
Deming (010226)	27,527	55	21%	5%	0%	16%	0%
Raging River (070408)	22,853	56	21%	5%	0%	15%	1%
Skookum Creek (010309)	23,905	60	20%	4%	0%	16%	0%
West Shannon (040435)	14,333	68	16%	2%	0%	14%	0%
Hutchinson Creek (010310)	13,975	72	15%	5%	0%	10%	0%
Jordan (050108)	21,252	73	15%	0%	0%	15%	0%
Ebey Hill (050214)	19,812	77	14%	0%	0%	13%	0%
Warnick (010229)	25,436	81	12%	7%	1%	4%	0%
Lower Pilchuck Creek (050313)	19,364	83	11%	0%	0%	11%	0%
Acme (010311)	23,518	87	11%	0%	0%	10%	0%
Grandy (040534)	18,856	88	10%	1%	0%	9%	0%
Alder (030103)	22,865	89	10%	3%	0%	7%	0%
Howard Creek (010308)	39,040	95	10%	1%	0%	8%	0%
Cherry (070420)	38,183	96	9%	3%	0%	6%	0%
Olney Creek (070225)	20,655	101	9%	2%	0%	7%	0%
Gilligan (030106)	18,879	103	8%	1%	0%	8%	0%
Day Creek (030105)	22,203	106	8%	0%	0%	8%	0%
Rinker (040321)	20,481	108	8%	5%	0%	3%	0%
Woods Creek (070223)	42,463	110	8%	1%	0%	7%	0%
Deer Creek (050201)	41,881	112	8%	2%	0%	5%	0%
Porter Canyon (010327)	18,550	113	7%	2%	0%	5%	0%

Table E-21. Percent of the Watershed Classified as Moderate for Moist Soil Compaction Potential ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Kenney Creek (010230)	2,791	115	7%	0%	0%	7%	0%
Tate (070409)	9,798	116	7%	1%	0%	6%	0%
Loretta (030104)	15,769	118	7%	1%	1%	4%	0%
Cavanaugh (050316)	29,722	122	7%	2%	0%	5%	0%
Canyon Creek (010232)	36,807	126	6%	2%	0%	4%	0%
East Shannon (040436)	34,065	127	6%	2%	0%	4%	0%
Hazel (050203)	24,179	128	5%	3%	0%	1%	0%
Upper NF Stilly (050202)	32,833	130	5%	2%	1%	2%	0%
Wallace River (070217)	24,667	132	5%	0%	0%	4%	0%
Tenas (040319)	36,688	133	4%	2%	1%	2%	0%
Clearwater Creek (010328)	14,330	134	4%	4%	0%	0%	0%
Jim Creek (050109)	30,690	135	4%	0%	0%	4%	0%
Corkindale (040531)	24,194	136	4%	1%	2%	1%	0%
Samish River (030301)	57,397	137	4%	0%	0%	4%	0%
Stimson Hill (050215)	18,833	138	4%	0%	0%	4%	0%
Marmot Ridge (010306)	31,794	141	4%	2%	0%	2%	0%
Hilt (040322)	12,453	145	3%	0%	0%	3%	0%
Sultan River (070224)	24,388	146	3%	0%	0%	2%	0%
Hansen Creek (030102)	29,010	148	3%	0%	0%	3%	0%
Nookachamps (030107)	47,730	149	3%	1%	0%	2%	0%
Jackman (040529)	16,399	150	3%	0%	0%	2%	0%
Verlot (050107)	23,540	151	3%	0%	1%	1%	0%
Sauk Prairie (040320)	14,137	152	2%	1%	0%	2%	0%
Youngs Creek (070219)	23,776	155	2%	0%	0%	2%	0%
Pilchuck Mtn (070226)	42,517	157	2%	1%	0%	2%	0%
French Boulder (050204)	45,327	160	2%	1%	0%	1%	0%
Lummi Island (010617)	5,063	163	1%	0%	0%	1%	0%
Samish Bay (010414)	13,258	164	1%	0%	0%	1%	0%
Friday Creek (030313)	24,129	169	1%	0%	0%	1%	0%
Spada (070216)	44,197	171	1%	1%	0%	0%	0%
Lake Whatcom (010412)	35,957	176	0%	0%	0%	0%	0%
Silverton (050106)	46,399	178	0%	0%	0%	0%	0%
Planning Unit Average			11%	3%	1%	7%	0%

Table E-21. Percent of the Watershed Classified as Moderate for Moist Soil Compaction Potential ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Olympic Experimental State Forest							
Middle Hoh (200607)	46,272	12	56%	45%	1%	11%	0%
Sol Duc Lowlands (200416)	22,368	19	48%	7%	13%	27%	1%
Upper Clearwater (210116)	58,265	23	44%	44%	0%	0%	0%
Sol Duc Valley (200316)	16,585	25	42%	11%	0%	30%	1%
Sol Duc Valley (200201)	47,220	38	31%	10%	11%	9%	1%
Hoh Lowlands (200608)	30,244	50	23%	4%	0%	19%	0%
Bogachiel (200412)	44,993	51	23%	10%	1%	12%	0%
Clallam River (190303)	22,235	53	22%	8%	0%	14%	0%
Quillayute Bottom (200417)	23,180	63	19%	6%	0%	11%	1%
Queets Corridor North (210213)	39,496	67	17%	6%	7%	1%	2%
East Dickey (200418)	26,657	70	15%	7%	0%	8%	0%
Goodman-Mosquito (200610)	33,529	71	15%	8%	0%	7%	0%
Matheney-Salmon (210211)	21,630	74	14%	7%	0%	1%	7%
Cedar (200609)	12,310	78	13%	5%	0%	8%	0%
Hoko (190302)	44,534	86	11%	2%	0%	8%	0%
Lower Clearwater (210114)	45,246	99	9%	3%	0%	6%	0%
Ozette Lake (200120)	35,130	104	8%	1%	0%	7%	0%
Rain Forest (200505)	56,435	107	8%	8%	0%	0%	0%
Pysht River (190204)	32,972	111	8%	0%	3%	5%	0%
West Dickey (200419)	28,311	119	7%	1%	0%	6%	0%
Queets Corridor South (210212)	29,667	125	6%	5%	1%	0%	0%
Sekiu Coastal (190301)	27,412	147	3%	0%	0%	3%	0%
Kalaloch Ridge (210115)	11,472	154	2%	2%	0%	0%	0%
Planning Unit Average			19%	9%	2%	8%	1%
South Coast Planning Unit							
Scatter Creek (230403)	31,680	28	39%	0%	0%	38%	1%
Mox Chehalis (220106)	23,315	52	22%	1%	0%	21%	0%
Lower Skookumchuck (230404)	44,616	79	13%	2%	0%	11%	0%
Elk Creek (230117)	38,773	91	10%	2%	0%	6%	1%
Waddel Creek (230501)	28,982	100	9%	5%	0%	3%	0%
Porter Creek (230522)	32,023	102	8%	8%	0%	0%	0%
Garrard Creek (230220)	49,056	121	7%	1%	0%	6%	0%
Naselle Headwaters (240107)	48,336	124	6%	0%	0%	6%	0%
Rock-Jones (230116)	22,917	129	5%	2%	0%	3%	0%

Table E-21. Percent of the Watershed Classified as Moderate for Moist Soil Compaction Potential ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Cedar Creek (230521)	32,505	131	5%	1%	0%	2%	2%
Mill Creek (240305)	15,699	139	4%	4%	0%	0%	0%
Nemah (240212)	40,522	143	3%	1%	0%	3%	0%
Willapa Headwaters (240306)	62,581	144	3%	1%	0%	3%	0%
Curtis (230112)	43,351	156	2%	1%	0%	1%	0%
Lower Naselle (240108)	36,688	159	2%	1%	0%	1%	0%
Joe-Moclips (210408)	50,805	161	2%	0%	0%	0%	2%
Lincoln Creek (230219)	48,086	162	2%	1%	0%	1%	0%
South Fork Willapa (240314)	26,664	166	1%	0%	0%	1%	0%
Copalis River (210407)	40,529	168	1%	0%	0%	0%	1%
Lower Willapa (240315)	32,329	172	1%	0%	0%	1%	0%
North River Headwaters (240402)	34,532	174	0%	0%	0%	0%	0%
Palix (240213)	35,825	175	0%	0%	0%	0%	0%
Bunker Creek (230218)	22,788	177	0%	0%	0%	0%	0%
Elk River (220625)	32,340	179	0%	0%	0%	0%	0%
Planning Unit Average			6%	1%	0%	5%	0%
South Puget Planning Unit							
Squaxin (140003)	1,066	5	71%	13%	0%	0%	58%
Hood (150201)	145,611	7	68%	18%	0%	43%	7%
Summit Lake (140002)	29,140	8	64%	18%	0%	45%	1%
Howard Hansen (090103)	46,472	13	56%	21%	0%	27%	8%
Olympia (130202)	18,529	15	56%	6%	0%	46%	4%
North Fork Green (090104)	18,410	20	48%	19%	0%	23%	6%
Tiger (080303)	40,881	26	41%	13%	0%	20%	8%
Cumberland (090202)	26,260	37	32%	3%	0%	27%	2%
East Creek (110113)	14,429	39	31%	4%	14%	11%	1%
Mineral Creek (110110)	23,047	46	26%	5%	0%	19%	3%
Busy Wild (110204)	56,966	75	14%	4%	0%	9%	1%
North Fork Mineral (110112)	16,072	80	12%	8%	0%	3%	1%
Reese Creek (110106)	5,036	90	10%	10%	0%	0%	0%
Ashford (110104)	27,680	117	7%	2%	3%	1%	0%
Catt (110108)	13,279	140	4%	4%	0%	0%	0%
Planning Unit Average			36%	10%	1%	18%	7%

Table E-21. Percent of the Watershed Classified as Moderate for Moist Soil Compaction Potential ^{1/}

Watershed Name (and Number)	Total Acres	Rank ^{2/}	Watershed Classified as Moderate ^{3/}	Percentage Breakdown by Ownership ^{4/}			
				DNR	Federal	Private ^{5/}	Other ^{6/}
Straits Planning Unit							
Thorndike (170105)	16,587	2	81%	7%	2%	72%	1%
Ludlow (170104)	22,897	3	77%	7%	0%	70%	0%
Dabob (170106)	16,871	4	76%	23%	0%	53%	1%
Chimakum (170203)	28,202	6	68%	5%	5%	55%	3%
Lilliwaup (160204)	29,080	9	61%	39%	0%	23%	0%
Port Angeles (180211)	24,883	11	57%	11%	1%	44%	1%
Salt (190108)	26,336	14	56%	25%	0%	30%	1%
Discovery Bay (170202)	58,871	17	53%	8%	0%	40%	5%
Siebert McDonald (180202)	35,481	22	46%	12%	0%	33%	0%
Little Quil (170107)	28,536	24	43%	8%	0%	35%	0%
Bell Creek (180104)	5,969	27	40%	2%	0%	37%	1%
Sequim Bay (170201)	26,752	33	35%	13%	0%	20%	2%
Lyre (190107)	11,021	35	33%	21%	1%	10%	1%
Dungeness Valley (180103)	43,200	49	23%	6%	0%	16%	0%
Sutherland-Aldwell (180310)	35,109	58	21%	9%	0%	11%	1%
Hamma Hamma (160203)	69,941	64	18%	10%	0%	7%	0%
Big Quil (170108)	51,823	76	14%	6%	1%	7%	0%
Twins (190206)	20,351	123	6%	4%	1%	2%	0%
Planning Unit Average			45%	12%	1%	31%	1%

1/ Watershed with greater than 5% ownership that have soils classified as moderate for moist soil compaction potential are ranked by percent area of watershed that meets these criteria.

2/ Includes privately owned industrial and non-industrial (i.e., small landowner) forest land

3/ Includes, municipal, tribal, non-DNR state lands, and other lands